User's Guide to

ProRep 4.0

By Spalding Software Inc.

This Page Intentionally Left Blank

Contents

Chapter 1: Installation 1

Entering the Serial Number and License Key 1
Installing the Software to a Network Drive 2
Installing the Software from the Network Drive to a Workstation 3
Installing the Software from the CD to a Workstation 4
Setting the Default Folder for Files 6
Running ProRep 7
Changing the Logo 8
Support 9

Chapter 2: Introduction 11

Overview 11
The ProRep Desktop 12
Resources for Learning ProRep 12
ProRep Manual 12
ProRep Tutorial 13

Chapter 3: The Information ProRep Provides 15

Daily Reports 15
Detailed Production Sheet Report 15
Production Summary Report 16
Associate Information 17
Pre-Defined Associate Reports 17
User-Defined Associate Reports 20
Pre-Defined Associate Graphs 20
User-Defined Associate Charts 21
Work Center Information 22
Pre-Defined Work Center Reports 22
User-defined Work Center Reports 24
Pre-Defined Work Center Charts 25
User-Defined Work Center Charts 26
Allocation Information 26
Corporate Wide Information 28

Chapter 4: How ProRep Works 29

Overview 29
Tables 31
Work Center 31
Associates 32
Allocations 33
Activities 34

Elements 35
Types of Work 35
Work Center Account Groups 36
Associate Account Groups 37
Allocation Account Groups 37
Datafields 37
How Performance and Productivity are Measured 39

Chapter 5: Creating a New ProRep System 43

Preparations Before Adding a New System 43
Adding a New System 43
Customizing ProRep to Your Needs 50
Changing the System Title 51

Chapter 6: Creating and Maintaining the Tables 53

Work Centers 53
Adding or Editing a Work Center 54
Specifying the Work Center's Identification Code 55
Entering the Work Center's Description 55
Specifying the Work Center's Supervisor 55
Specifying the Password for Approving Production Sheets 55
Specifying the Work Center's Shift 56
Setting the Work Center's Normal Work Hours 56
Specifying Which Types of Work are Performed in a Work Center 57
Deleting a Work Center 57
Associates 58
Adding or Editing Associates 58
Adding or Updating Associate Information by Importing 59
Specifying the Associate's Identification Code 60
Entering the Associate's Name 60
Specifying an Associate's Home Work Center 60
Specifying an Associate's Primary Grouping 61
Specifying an Associate's Shift 61
Entering the Associate's Date of Hire 61
Entering the Associate's Social Security Number 62
Entering the Associate's Pay Rate 62
Not Including the Associate on the Incentive Payroll Report 62
Specifying the Associate's Incentive Performance Goal 63
Specifying Associate ID's Used in Other Systems 63
Deleting an Associate 64
Associate Import File Format 65
Allocations 67
Adding or Editing an Allocation 67
Specifying an Allocation's Identification Code 68
Specifying an Allocation's Description 68
Deleting an Allocation 68
Work Center Account Groups 69
How Work Center Group Totals are Calculated 70
Adding or Editing a Work Center Group 70
Adding or Removing Work Centers from a Group 72
Deleting a Work Center Group 72
Associate Account Groups 72
How Associate Group Totals are Calculated 73

Adding or Editing an Associate Group 73
Adding or Removing Associates from a Group 74
Making a Group a Primary Group 75
Deleting an Associate Group 75
Allocation Account Groups 75
How Allocation Group Totals are Calculated 76
Adding or Editing an Allocation Group 76
Adding or Removing Allocations from a Group 77
Deleting an Allocation Group 78
Datafields 78
Adding or Editing a Datafield 79
Allocating Space for More Datafields 80
Deleting Datafields 82
Purging Deleted Datafields from the DataDiary 84
Fiscal Calendar 84
Adding a New Year 85
Specifying the First Day of a Fiscal Year 87
Specifying a 53 week year 88
Fiscal Calendar Structure 88

Chapter 7: Setting Up Activities 93

Elements 93
Adding or Editing an Element 94
Deleting an Element 95
Mistakes 96
Types of Work 97
Adding or Editing a Type of Work 98
Enabling the Measurement of Quality for a Type of Work 99
Specifying the Reasons Why an Item Fails a Quality Audit 99
Tracking the Cost of Quality Failures 100
Reducing Incentive Pay as a Consequence of Quality Failures 100
Displaying the Type of Work's Datafields 101
Deleting a Type of Work 101
Activities 102
Tracking the Cost of an Activity 103
Adding or Editing an Activity 104
Specifying the Activity's Identification Code 105
Entering the Activity's Description 106
Specifying the Activity's Type of Work 106
Specifying that Document Numbers will be Entered 106
Entering Multiple Documents for the Same Period of Time 106
Getting Units from a File Created by Another System 107
Reusing a Document's Units in the Lookup File 107
Distributing Hours and Units to an Allocation Account 108
Specifying that the Activity has No Standard 109
Specifying that the Activity has an Individual Standard 110
Specifying that the Activity has a Team Standard 110
Paying Incentive based on the Associate's Past Performance 112
Calculating Performance for a Support Activity 113
Automatically Prorating Measured Hours to an Activity 113
Using the Same Standard for All Allocations 114
Automatically Calculating a Historical Standard 114
Including this Activity's Units in the Total Units Produced 114
Selecting How Standard Times are Entered and Displayed 114

Adding an Element to an Activity 115
Deleting an Element from an Activity 116
Specifying the Order in Which Elements are Listed 116
Specifying the Elements that are Included in the Activity Totals 116
Allowing Units from the Lookup File to be Changed 116
Specifying the Element's Default Standard 116
Tracking the Number of Times an Activity is Performed 117
Selecting the Element Used for the Historical Standard 117
Displaying the Settings for all of the Elements 117
Adding an Allocation to an Activity 119
Deleting an Allocation from an Activity 119
Specifying the Standards for an Allocation's Elements 119
Displaying the Activity's Datafields 119
Using the Greater of the Goal or Actual Performance for Incentive Pay 121
Paying an Additional Incentive that is not Based on Performance 121
Deleting an Activity 121

Chapter 8: Daily Procedures 123

Understanding the Active Week Concept 123
Creating Daily Files 124
Correcting the Daily Files' Date 125
Deleting Daily Files Without Posting 125
Entering or Importing Data Into Production Sheets 125
Entering Data into Quality Sheets 126
Printing Daily Reports 126
Approving Daily Files for Posting 131
Posting Daily Files 132
Showing Production Sheet History 134
Correcting Posted Data 135

Chapter 9: Weekly Procedures 137

End of Week Processing 137
Backing Up ProRep 139
Automatic LAN Backups 141

Chapter 10: Entering Data Directly into ProRep 143

Key Entry into Production Sheets 143
Starting a New Production Sheet for an Associate 145
Entering a Break and Other Activities Occurring in the Middle of a Job 148
Removing Lunch and Other Non-Paid Time 148
Associates Entering Their Own Data 149
Starting Real-Time Self-Entry 149
Entering Break, Lunch and Other Interrupting Events 152
Special Activity Codes 153
Clocking Out at the End of the Day 153
Associates Sharing a PC 153
Assigning a PC to an Associate 154
Viewing an Associate's Transaction 154
Modifying Previously Entered or Missed Transactions 154
Displaying the Time It Should Take to Complete an Activity 154
Closing Real-Time Self-Entry 155
Entering Data Into Quality Sheets 155

Chapter 11: Acquiring Production Data from Other Computer Systems159

Importing Data from a Warehouse Management System 159
Importing Data from a Time and Attendance System 159
Getting Units from Another Computer System While Entering Production Data 159
Importing Data into the Document Lookup File 161
Manually Purging Records from the Lookup File 161
Packing the Lookup File 162
Reindexing the Lookup File 162
Layout of the Lookup Import File 162
Importing Data from a Production Sheet Import File 163

Chapter 12: Using the DataDiaries 165

Viewing Data in a DataDiary 165
Tracking Data Not Associated with an Activity 166
Entering and Modifying Data in the DataDiaries 167
Importing Data from Another Application into a DataDiary 169
Record Layout of the File to be Imported 169
Importing the File 170
Exporting Data for Use in Another Application 171

Chapter 13: Printing and Viewing Reports 177

Daily Production Reports 177
Detailed Production Sheet Report 178
Production Summary Report 178
Hours Audit Report 179
Viewing Daily Production Reports 180
Associate Analysis 181
Associate Performance Analysis 181
Associate Cost Analysis 182
Account Comparison Time Series Reports 183
Account Comparison One-Line Reports 188
Activity Detail Reports 190
Viewing Reports 193
Distributing Reports 194
Exporting Report Data 195

Chapter 14: Setting up User-Defined Formulas and Expressions 197

Formulas 197
Common Formulas 197
Complex Formulas 200
Expressions 201

Chapter 15: Modifying and Creating Report Layouts 203

Account Comparison Report Layouts 203
Adding a New Report 204
Editing an Existing Report 206
Assigning a Report Title 207
Modifying the First Column (Date/Account) 207
Adding or Editing a Column 207
Including Last Year's Data in a Column 208
Including a Percent Increase/Decrease in a Column 208

Formatting Numbers in a Column 208
Selecting the Fonts of Numbers in a Column 208
Specifying Column Totals or Averages 209
Adjusting the Width of a Column 209
Building Column Headings 209
Entering Text for a Column Heading 210
Changing a Column Heading's Font, Size, or Color 210
Centering a Column Heading Across Multiple Columns 210
Selecting the Data to Appear in the Column 210
Report Options 211
Adjusting the Heading Height 212
Selecting Paper Orientation 212
Selecting Paper Size 212
Printing a Logo on a Report 212
Printing Grid Lines on a Report 212
Printing Notes on a Report 212
Selecting the Accounts and Groups to be Printed 212
Suppressing Printing of Lines Without Data 213
Activity Detail Report Layouts 214
Adding a New Report 216
Variables 217
Editing an Existing Report 218
Adding or Editing a Report Column 219
Adding and Editing lines on a report 221
Line Description 221
Specifying the Type of Line 221
Creating Separation Between Lines 222
Assigning Datafields to the Variables 222
Including a Variable in a Total or Subtotal Line 222
Report Options 222
Selecting the Accounts and Groups to be Printed 223

Chapter 16: Charts and Graphs 225

Viewing and Printing Line Graphs 225
Selecting the Years to Plot 230
Selecting the Accounts or Groups to Plot 230
Selecting the Variables to Plot 230
Plotting by Day, Week or Month 230
Selecting the Time Period When Plotting by Day 230
Changing the Scale 231
Setting the Scale's Starting Point 231
Plotting Arbitrary Horizontal Lines 231
Using the Same Scale for Daily, Weekly and Monthly Plotting 231
Plotting a Line's Average Value 232
Drawing Symbols at Each Point That is Plotted 232
Printing a Logo on a Graph 233
Plotting Lines as a Percent Variance from Average 233
Handling Points that Have a Value of Zero 233
Plotting Only Within a Specific Range of Dates 234
Printing the Graph 234
Modifying and Creating Line Graphs 235
Adding or Editing a Graph 235
Selecting the Data to be Plotted 237
Specifying the Graph's Default View 238

Viewing and Printing Pie Charts 238
Selecting the Pie Chart Style 240
Selecting which Accounts are Charted 240
Selecting the Pie Chart's Data 240
Selecting the Pie Chart Color 240
Selecting the Date Range 241
Printing Pie Charts 242
Modifying and Creating Pie Charts 242
Selecting the Data to be Charted 244
Distributing Charts 245
Copying Charts into Other Applications 246

Chapter 17: Exchanging Data with other ProRep Systems 247

Exporting Data From a ProRep System 247
Importing Data from another ProRep System 248
Creating an ODE Layout 249
Importing an ODE File 251

Appendix A: Using the Incentive Features 253

Incentive Module Parameters 253
Specifying if Associates Have the Same or Different Incentive Goals 254
Specifying if Incentive Pay is Based on Associate Pay Rates or a Fixed Rate 254
Paying a Bonus for Reaching the Goal 254
Options for Handling the Payment of Small Incentive Amounts 255
Minimum amount that must be earned before incentive is paid 255
Minimum amount that is paid if any incentive is paid 255
Not Including Pay on Incentive Reports 255
Using Social Security Numbers instead of Associate Numbers 255
Excluding Associates from Incentive Pay Based on the Number of Hours Worked 256
Controlling How Overtime Affects Incentive Pay 256
Factoring Quality Failures into Incentive Pay 257
Controlling the Incentive Payoff Rate 258
Capping the Incentive Payoff 259
Creating a File with Incentive Pay Data for Payroll 260
Creating a Spreadsheet File with Incentive Pay Results 261
Using Manually Calculated Overtime Hours when Calculating Incentive Pay 262
Tracking the Incentive Calculation Results in the DataDiaries 262
Associate Table Settings Related to Incentives 263
Activity Table Settings Related to Incentives 264
Calculating Incentives and Printing the Reports 267

Appendix B: Setting up the Quality Measurement Feature 271

Activating the Quality Feature 271
Mistake Table Settings Related to Quality 272
Type of Work Table Settings Related to Quality 273
Incentive Module Parameters Related to Quality 275
Recording the Results of Audits 276

Appendix C: User IDs and Passwords 281

Adding a New User 281

Appendix D: Corporate Wide Reporting Systems 285

What a Corporate Wide Reporting System Does 285
Corporate Wide Reports and Graphs 286
How the Corporate Wide Reporting System Works 287
Using a Corporate Control File 288
Cloning a ProRep System 289
Multiple Facilities Performing the Same Functionality 293
Consolidating Information from Diverse Operations 293

Appendix E: Entering Production Sheets with Elapsed Times 295

Specifying Elapsed Time Entry 295
Entering Data Using Elapsed Time Entry 296
Starting a New Production Sheet for an Associate 297

Appendix F: Command Line Processing in ProRep 301

Command Line Syntax 301
Command Line Date Parameters: 302
Command Line Functions: 302
APPLYTA *date* 302
BACKUPTABLES *[filename]* 302
BACKUPFULL *[filename]* 303
CONVERTDAY *date* 303
EXPORTDAY *date dxtype filename [blankdocs non-paid elements descriptions]* 303
EXPORTDDDATA *datadiar date numdays filename [dxtype]* 303
EXPORTODE *datadiar date numdays filename* 305
EXPORTTABLES *dxtype folder* 305
IMPORTASSOC *filename* 305
IMPORTDAY *date filename* 305
IMPORTLOOKUP *filename* 305
IMPORTODE *datadiar odenum* 306
KIOSK *date* 306
KIOSKGROUP *date* 306
KIOSKSELF *date* 306
PRINTDAY *date* 306
SCRIPT *[filename]* 306
UNCONVERTDAY *date* 307
UPLOADDAY *date* 308
Command line examples: 308
DataExport Translation Types for Exporting 308
Spreadsheets: 308
Databases: 309
Formatted Text: 309
Text Formats: 309
Word Processing: 310
Extended Return Codes 311
Error Logs and Notifications 312

Appendix G: Production and Quality Sheet Import File Formats 315

Stop Time Production Sheet Files 315
Header Record 315
Detail Records 316
Elapsed Time Production Sheet Files 317
Header Record 317
Detail Records 318

Quality Sheet Files....319
Header Record....319
Detail Records....319

Index **321**

Chapter 1: Installation

This chapter describes how to install ProRep and get technical support. Following are the three ways in which ProRep can be installed and run:

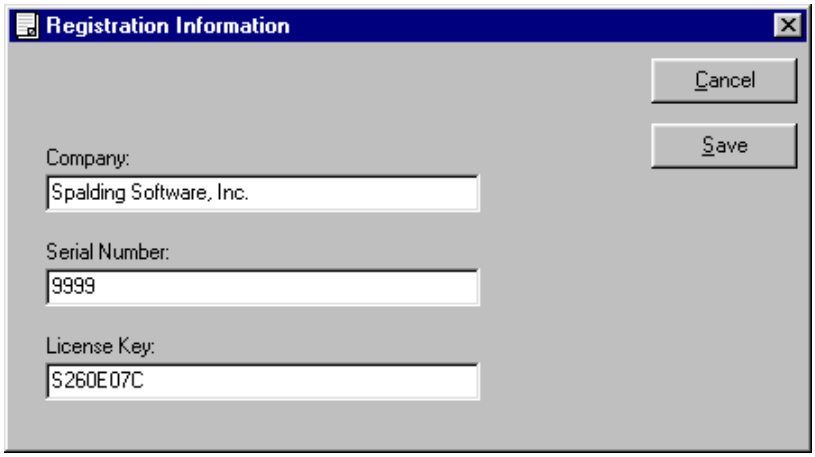
- Both the software and the data files reside on a network drive. This is the recommended way.
- The software files reside on each user's local drive and the data files reside on a network drive.
- Both the software and the data files reside on a local drive. This is not recommended since ProRep can only be accessed on one computer.

Putting both the software files and data files on a network drive is recommended. This makes administration of the software much easier. When the software is on a network drive, new versions of the software usually need to be installed only on the network. If the software resides on each user's PC, new versions of the software must be separately installed on each PC.

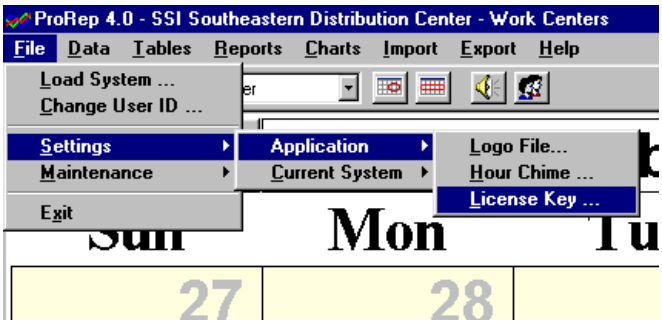
Entering the Serial Number and License Key

During the installation of ProRep, a prompt will ask for the serial number and license key. The license key controls the number of associates that can be entered into the associate table and enables the optional modules.

If the serial number and license key are left blank, the software will function as an evaluation copy.



To change the license key after the initial instillation, from the menu bar select File, Settings, Application, License Key.



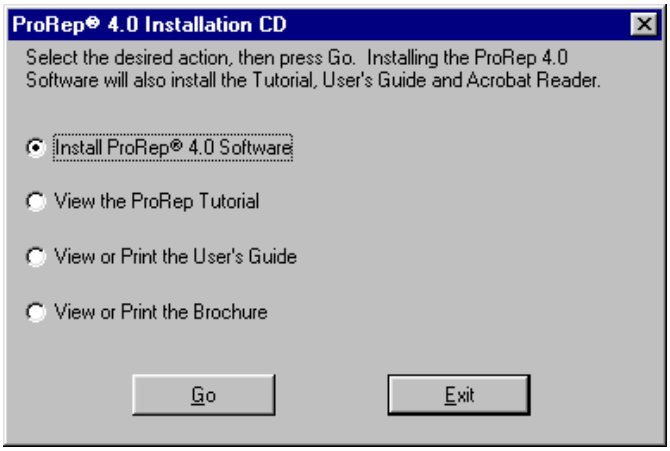
The license key dialog box is displayed.

Installing the Software to a Network Drive

When sharing a single copy of the ProRep programs on a network, the software must first be installed to a network drive from a workstation. Then on each workstation, it is installed from the network drive to the local hard drive. The result is that most of the ProRep programs reside on the network drive and a few DLLs and VBXs are copied to each PC.

Note: The software must be installed from a true workstation. Do not install the software from a PC that shares a local drive with other users.

To install the ProRep software to a network drive, run the Setup.exe program located in the main folder of the installation CD. The following dialog box is be displayed.


ProRep® 4.0 Installation CD
Select the desired action, then press Go. Installing the ProRep 4.0 Software will also install the Tutorial, User's Guide and Acrobat Reader.
Install ProRep® 4.0 Software
View the ProRep Tutorial
View or Print the User's Guide
View or Print the Brochure
Go
Exit

Select install ProRep 4.0 Software from the dialog box.

Select whether or not the software should also be installed to the PC workstation so that ProRep can be run from this workstation.

The software can be installed on any shared folder on the network. For the purpose of clarity, the folder that is to contain the program files should be named ProRep as shown in the following example:

G:\Users\Shared\ProRep

The installation process will create a folder in the ProRep folder named PRData as shown in the following example:

G:\Users\Shared\ProRep\PRData

The folder is the default folder that ProRep uses for its databases. During installation, a sample ProRep database is copied into this folder.

After installation, if the software was also installed to the workstation, there will be a shortcut on the desktop for ProRep and an entry in the Start Programs menu.

On each workstation that is to run ProRep, run the Setup.exe program in the ProRep folder on the network drive as described in the next section.

Installing the Software from the Network Drive to a Workstation

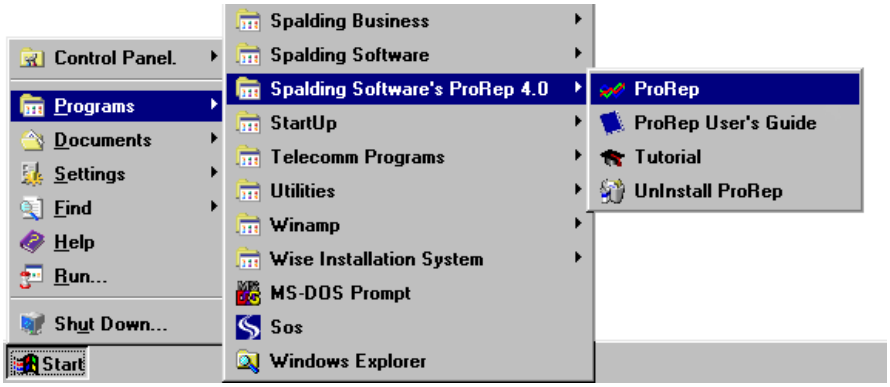
After the software program files are installed on the network drive, ProRep must be installed on each workstation. The result is that most of the program files reside on the network drive and a few DLLs and VBXs are copied to the workstation's local drive.

To install ProRep to a workstation, from the workstation run the Setup.exe program in the folder on the network drive which contains the ProRep program files as shown in the following example:

G:\Users\Shared\ProRep\Setup.exe

When installation is completed, there will be a shortcut on the desktop for ProRep.

Menu items are also added to the Start Programs menu that are titled Spalding Software's ProRep, and under that an entry for ProRep.



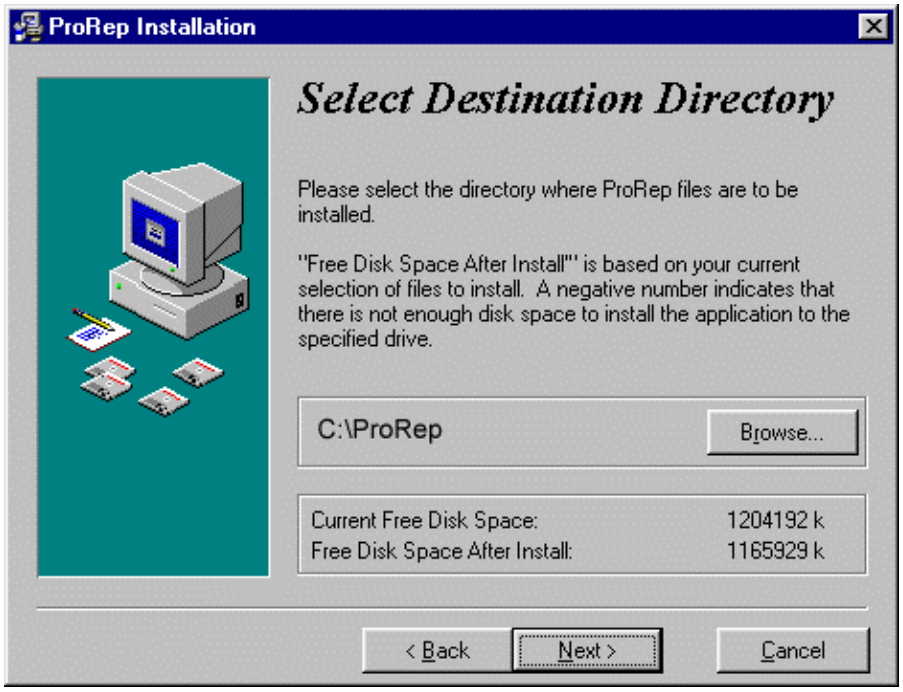
When ProRep is run from the workstation, ProRep by default will look for its databases in the PRData folder on the network drive.

Installing the Software from the CD to a Workstation

To install ProRep on a local drive, run the Setup.exe program in the main folder of the CD. Select install ProRep 4.0 Software from the dialog box.

ProRep® 4.0 Installation CD
Select the desired action, then press Go. Installing the ProRep 4.0 Software will also install the Tutorial, User's Guide and Acrobat Reader.
Install ProRep® 4.0 Software
View the ProRep Tutorial
View or Print the User's Guide
View or Print the Brochure
Go
Exit

This displays a dialog box that prompts for the location in which to install the ProRep program files.


ProRep Installation
Select Destination Directory
Please select the directory where ProRep files are to be installed.
"Free Disk Space After Install"' is based on your current selection of files to install. A negative number indicates that there is not enough disk space to install the application to the specified drive.
C:\ProRep
Browse...
Current Free Disk Space: 1204192 k
Free Disk Space After Install: 1165929 k
< Back
Next >
Cancel

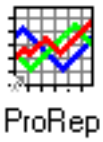
Unless there is another reason, accept the default folder.

The installation process will create a folder named ProRep. In the ProRep folder, it will also create another folder named PRData as shown in the following example:

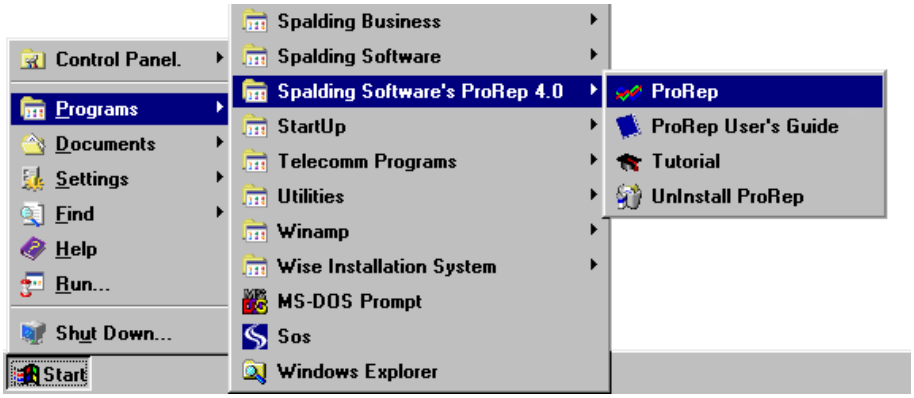
C: \ProRep\PRData

The PRData folder is the default folder that ProRep uses for its databases. During installation, a sample ProRep database is copied into this folder.

When installation is completed, there will be a shortcut on the desktop for ProRep.



Menu items are also added to the Start Programs menu that are titled Spalding Software's ProRep, and under that an entry for ProRep.

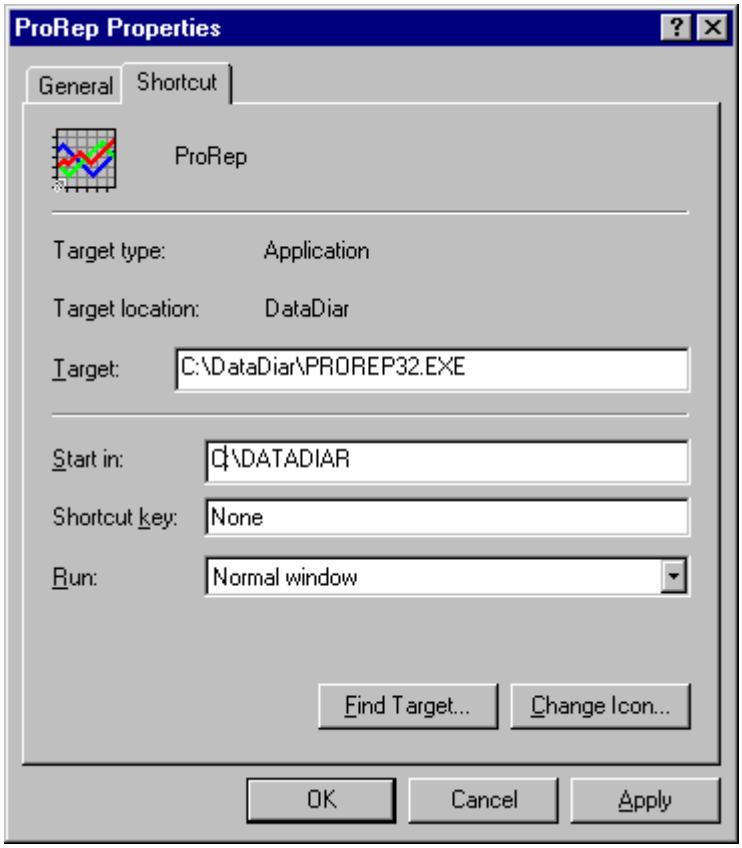


When ProRep is installed from the CD, ProRep by default will look for its databases in the PRData folder on the local drive. If ProRep's databases are on a network server, the default folder for files should be changed as described in the next section.

Setting the Default Folder for Files

After ProRep is installed, by default it looks for its databases in the PRData folder in the folder that contain the program files. If the software was installed to a workstation from the CD, it looks on the local drive for its databases. If the ProRep databases reside on the network server, the default folder should be changed.

To change the default folder for files, right click on the ProRep shortcut on the Windows desktop and from the pop-up menu select Properties. This displays the ProRep Properties dialog.



The Target, or command line, will probably look like the following:

C:\ProRep\ProRep32.exe

The Target above tells windows to run the ProRep32.exe program located in the C:\ProRep folder. The Target can include two additional parameters.

The first parameter is a number between 0 and 9. This is the ProRep database system to automatically load. Entering a 0 tells ProRep not to automatically load any system and instead display the list of the ProRep systems in the default folder.

For example, to direct ProRep to automatically load system number 4, the command line would read:

C:\ProRep\ProRep32.exe 4

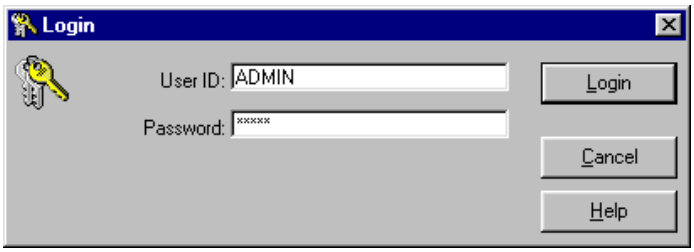
The second parameter is the folder to be used as the default folder for the ProRep database files.

For example, to direct ProRep to display all of the systems in the G:\ProRep\PRData folder, the command line would read:

C:\ProRep\ProRep32.exe 0 G:\ProRep\PRData

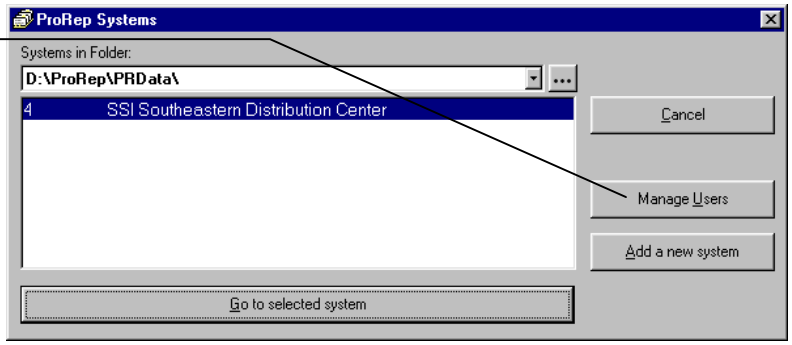
Running ProRep

Every time ProRep is run a user ID and password must be entered. By default, ProRep has one pre-established user. This user's ID is Admin, and the password is Admin. The Admin user ID and password should be changed for security reasons.



To add users, change user names or passwords, click the Manage Users button on the initial ProRep screen. See Appendix B for more information on adding users.

Setup additional users by clicking the Manage Users button.

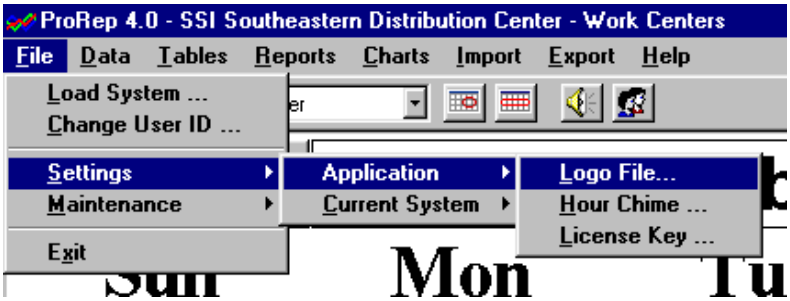


Changing the Logo

The logo displayed below appears in the upper right hand corner of all printed reports and graphs.

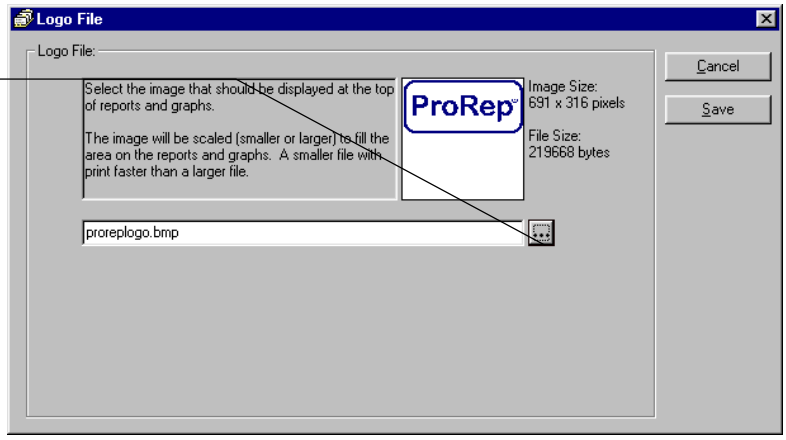
ProRep®

To change the logo select File, Settings, Application, Logo File



This displays the logo file dialog box.

Click the button to browse for the logo.


Logo File
Logo File:
Select the image that should be displayed at the top of reports and graphs.
The image will be scaled (smaller or larger) to fill the area on the reports and graphs. A smaller file with print faster than a larger file.
ProRep
Image Size:
691 x 316 pixels
File Size:
219668 bytes
proreplogo.bmp
Cancel
Save

The Graphic will automatically scale to fit the space in the corner of the report. The file can be either a JPG, GIF, BMP, or WMF graphic.

Support

With the initial purchase of the software license, a one year subscription to Spalding Software's ProRep support and update service is included. The subscription to this service should be maintained to receive continued support.

If you have problems with installation or use of the program you should, there are several ways of obtaining help:

- A bulletin board is maintained on the Spalding Software web site where users can post questions and review answers to previously asked questions. The web site location is:

  http://www.spaldingsoftware.com

- E-mail your question to:

  support@spaldingsoftware.com

- You can send a fax to:

  (770) 449-0549

- You can call us at:

  (770) 449-0052

This Page Intentionally Left Blank

Chapter 2: Introduction

ProRep is a productivity measurement and reporting system. The original version was a PC DOS application that was originally released in 1985. The current version is a 32 bit Windows multi-user application.

Overview

ProRep provides information about the performance, productivity and quality of associates, work groups and processes. It addresses management's need for information about current operational results and how these results compare to past history.

ProRep calculates the performance of individuals and teams by comparing the results of each task that is performed to each task's standard. The standards can be pre-defined or engineered standards that are input directly into ProRep. The standards can also be automatically generated by ProRep based on past history.

The daily production data that is input into ProRep can come from a variety of sources. The data can be entered directly into ProRep by an associate scanning or keying in their own data at the completion of each task or by the associates maintaining a handwritten log that is later entered by someone else. The data can also be imported from other computer software such as a warehouse management system, a pick-to-light system, or a time and attendance system

Key operational statistics are saved in multi-dimensional databases of time series data for each associate, work center, process and allocation. Performance, productivity and quality information is kept for several years. From these databases, pre-defined and user-defined reports and charts can be produced that cover any period of time such as a day, week, month or year.

Reports and charts can show current results as well as make comparisons to plans, budgets or last year's results. Consolidations and roll-ups can also be produced so that each level of management can analyze their own results.

Typically, ProRep is installed on a network server and all supervisors and managers are provided access to ProRep. As a result, management is provided with immediate access to production information and ProRep's analysis tools.

The ProRep Desktop

ProRep's main window is an interactive desktop calendar as shown below:

This is called the ProRep calendar. The status of each day's production data is shown on the calendar. All actions and selections within ProRep are initiated from the ProRep calendar.

Resources for Learning ProRep

There are two major resources available for learning about ProRep. One of the resources is this manual. The other is an interactive on-screen tutorial.

ProRep Manual

This manual is organized in a manor similar to a classroom text book. It starts with the basics and moves on to more advanced topics. All options and settings are explained in detail in the manual. If there is a questions about what ProRep can do and where the selection is made, it is best to refer to the manual.

Everyone that runs ProRep or uses the information from ProRep should read the following chapters:

Chapter 2: Introduction

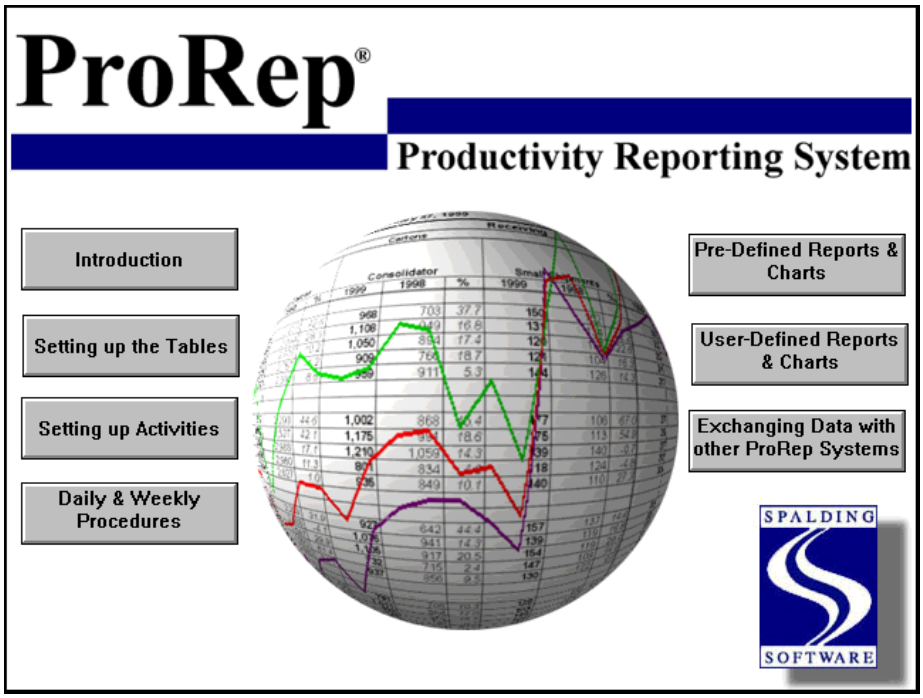
Chapter 3: The Information ProRep Provides

Chapter 4: How ProRep Works

The person responsible for setting up ProRep should read all remaining chapters. Others that use ProRep should read those sections that are appropriate for their needs.

ProRep Tutorial

The ProRep Tutorial is organized similarly to the manual.



The tutorial is less focused on the details of what selections and settings can be made. It is more focused on how to do things using ProRep's windows and dialogs. If there is a general question about how to use the software, it is best to refer to the on-screen tutorial.

This Page Intentionally Left Blank

Chapter 3: The Information ProRep Provides

ProRep's primary means for providing management and supervision with information is through reports and charts. Many different types of reports and charts are built into ProRep. Additionally, users can create their own customized reports and charts to focus on specific areas of interest.

All reports and charts can be printed or viewed on screen. They can also be saved as an Adobe Acrobat PDF file so that they can be shared with other people in your organization. Reports in PDF file format can be distributed through e-mail, the company's intranet or the Internet. They can be viewed on computers running Windows, Macintosh OS, Linux, IBM AIX and several other operating systems.

The examples shown in this chapter are only a sampling of the reports and charts that are available.

Daily Reports

Each day, after the production and optionally the quality data is entered, the daily reports can be printed. If additions or corrections to the data are made, the reports can be reprinted.

The Daily reports can also be saved to a PDF file rather than directly printed on paper. Supervisors and managers can then review their work center's reports on screen using the Adobe Acrobat reader supplied with ProRep. While viewing the report on screen, selected portions of the report, or the entire report can be printed.

Detailed Production Sheet Report

A separate detailed Production Sheet Report is printed for each work center. It lists all associates who worked in the work center. If an associate works in more than one work center they will appear on each work center's report.

SSI Southeastern Distribution Center

Detailed Production Sheet Report

Work Center: RCV - Receiving — **Monday, September 25, 2000**

Associate	Associate Code	Activity Code	Team	Allocation Code	Document	Activity Element		Units	Stop Time	Actual Hours	Earned Hours	Perf.
Washington, Joe	C90041	@CLOCKIN				Clock-In			07:30			
		RCON	2			Receive Consolidated		0	09:25	1.92	1.72	90%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	11:15	1.58	1.39	88%
		@LUNCH				Lunch				0.50		
		RCC	2			Receive Common Carrier		0	01:00	1.25	1.37	110%
		RCC	1			Receive Common Carrier		0	01:40	0.67	0.58	88%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	03:40	1.75	1.53	88%
		PUT		PI		Put Away		7	04:00	0.33	0.31	94%
						Pallets	7					
										8.00	6.91	92%
Williams, Tom	T21223	RCC	2			Receive Common Carrier		0	02:30	1.50	1.65	110%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	03:50	1.08	0.95	88%
		PUT		ICP		Put Away		15	04:30	0.67	0.67	100%
						Pallets	15					
										3.50	3.27	101%
Woods, Mary	A13542	@CLOCKIN				Clock-In			07:30			
		RCON	2			Receive Consolidated		0	09:30	2.00	1.79	90%
		BREAK				Break				0.25		
		@LUNCH				Lunch				0.50		
		RCC	1			Receive Common Carrier		0	12:15	2.00	1.75	88%
		RCON	2			Receive Consolidated		0	01:45	1.50	1.34	90%
		BREAK				Break				0.25		
		PUT		CORE		Put Away		24	03:15	1.25	1.07	86%
						Pallets	24					
		RCON	2			Receive Consolidated		0	03:45	0.50	0.45	90%
		CLEAN				Cleanup			04:00	0.25		
		RCC	1	ACME		Receive Common Carrier		326	04:00	0.00	0.00	0%
						Shipments	5					
						Cartons	326					
		RCC	2	CBP		Receive Common Carrier		497	04:00	0.00	0.00	0%
						Shipments	6					
						Cartons	497					
		RCC	1	CORE		Receive Common Carrier		215	04:00	0.00	0.00	0%

ProRep - printed by ADMINSTRATOR on Acrobat PDFWriter — Page: 1 — Printed: 6/21/00 10:38

The Detailed Production Sheet Report lists the details of all activities performed by the associate. For each job that the associate performs, it shows the amount of time and performance. On the last line for each associate, it shows the total hours and performance for the day. This report is primarily intended for use by front line supervisors and managers.

Production Summary Report

The Production Summary Reports consist of two parts. The first part is a separate one page summary for each work center. There is one line on the report for each associate that worked in the work center. If an associate works in more than one work center they will appear on each work center's report.

SSI Southeastern Distribution Center

Production Summary Report

Work Center: OF1 - Order Filling First Shift — **Monday, September 25, 2000**

		----- Performance -----				----- Actual Hours -----			----- Effectiveness -----			
Code	Name	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks	Total of All Work Centers
C11131	Baxter, Linda	86%	94%	91%	6.08	7.08	0.92	8.00	76%	81%	77%	8.00
A12456	Boggs, Charlie	94%	106%	104%	6.79	7.25	0.75	8.00	85%	97%	91%	8.00
C76354	Grubbs, John	94%	77%	78%	0.75	0.80	7.20	8.00	9%	66%	66%	8.00
T54566	Pugmire, Charles	85%	110%	104%	1.70	2.00	0.25	2.25	76%	94%	90%	8.00
A65657	Rockford, June	89%	95%	97%	5.09	5.75	2.25	8.00	64%	87%	88%	8.00
OF1	Order Filling First Shift	89%	95%	96%	20.42	22.88	11.37	34.25	60%	78%	81%	

The Production Summary Report lists the daily totals for each associate and the entire work center. It includes the total hours, performance and effectiveness. As a

way of quickly determining if performance is improving it shows the last 6 weeks and last 52 weeks average performance.

The last page of the Production Summary Report list one line of total information for each work center and the total of all work centers.

SSI Southeastern Distribution Center

Production Summary Report

Total of All Work Centers — **Monday, September 25, 2000**

		----- Performance -----				----- Actual Hours -----			----- Effectiveness -----		
Code	Name	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks
RCV	Receiving	92%	96%	95%	16.59	18.00	1.50	19.50	85%	89%	87%
OF1	Order Filling First Shift	89%	95%	96%	20.42	22.88	11.37	34.25	60%	78%	81%
OF2	Order Filling Second Shift	90%	100%	100%	7.06	7.83	1.42	9.25	76%	89%	88%
SHIP1	Shipping First Shift	83%	90%	89%	11.72	14.08	1.42	15.50	76%	82%	82%
SHIP2	Shipping Second Shift	91%	101%	100%	5.36	5.92	0.83	6.75	79%	93%	92%
CSA	Customer Service & Admin.	93%	95%	94%	9.11	9.75	6.25	16.00	57%	86%	86%
TotalofAll	Total of All Work Centers	90%	97%	96%	70.25	78.47	22.78	101.25	69%	87%	87%

The performance, productivity and quality information presented on the daily reports is stored in databases for several years. These databases contain the results of performing each activity by associate, work center and allocation. The databases are called DataDiaries. They are the source of information presented on pre-defined and user-defined reports and charts.

Associate Information

Weekly total performance, productivity and quality information about each activity that an associate performs is kept in a database for several years. This database is called the Associate DataDiary. Reports and charts can be produced for any period of time stored in the database.

Pre-Defined Associate Reports

One pre-defined report is an Associate Performance Analysis. This report presents each associates average performance for both the last 6 weeks and the last 52 weeks. On this example of the report, the associates are sorted in high to low order based on their last 52 weeks performance.

SSI Southeastern Distribution Center

Associate Performance Analysis

Sorted by Last 52 Weeks History

All Associates

Associate Name	Code	Performance		Direct Hours		Total Hours		% Direct Hours		Effectiveness		Date of Hire
		Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	
Williams, Tom	T21223	110%	112%	213	1,873	239	2,063	89%	91%	99%	102%	7/1/93
Stuckey, Alice	C29112	105%	108%	198	1,765	239	2,073	83%	85%	87%	92%	2/4/89
Stillwell, Yolanda	K92954	100%	107%	224	1,895	240	2,067	93%	92%	93%	98%	12/4/95
Pugmire, Charles	T54566	110%	104%	205	1,793	240	2,075	85%	86%	94%	90%	4/30/95
Boggs, Charlie	A12456	106%	104%	220	1,814	240	2,065	92%	88%	97%	91%	10/28/94
Carona, Maria	A21234	93%	97%	213	1,863	234	2,032	91%	92%	85%	89%	8/24/91
Rockford, June	A65657	95%	97%	219	1,882	239	2,070	91%	91%	87%	88%	9/15/92
Woods, Mary	A13542	96%	95%	210	1,819	240	2,079	88%	88%	85%	83%	2/10/93
Gonzalez, Jose	T43267	95%	94%	210	1,831	238	2,069	89%	88%	84%	84%	11/18/89
Hanley, Ruth	A62215	90%	92%	213	1,878	236	2,068	90%	91%	81%	84%	2/27/95
Baxter, Linda	C11131	94%	91%	205	1,739	237	2,046	87%	85%	81%	77%	12/1/94
Washington, Joe	C90041	91%	91%	189	1,649	237	2,065	80%	80%	73%	72%	9/28/92
McGuire, Carter	A39987	91%	88%	206	1,786	238	2,073	86%	86%	78%	76%	10/17/90
Bell, William	C23433	88%	88%	186	1,698	233	2,045	80%	83%	70%	73%	5/28/95
Grubbs, John	C76354	77%	78%	203	1,723	237	2,036	86%	85%	66%	66%	8/12/92

A histogram can also be printed that shows the spread and range of associate performances. Histograms graphically show how an associate's performance compares to that of coworkers.

SSI Southeastern Distribution Center

Associate Performance Analysis

All Associates

Last 6 Weeks

From	To	Number of Associates	%	Cum. %	Histogram
0%	9%	0	0%	0%	
10%	19%	0	0%	0%	
20%	29%	0	0%	0%	
30%	39%	0	0%	0%	
40%	49%	0	0%	0%	
50%	59%	0	0%	0%	
60%	69%	0	0%	0%	
70%	79%	1	7%	7%	**********
80%	89%	2	13%	20%	**********
90%	99%	8	53%	73%	**********
100%	109%	2	13%	87%	**********
110%	119%	2	13%	100%	**********
120%	129%	0	0%	100%	
130%	139%	0	0%	100%	
140%	149%	0	0%	100%	
150%	159%	0	0%	100%	
160%	169%	0	0%	100%	
170%	179%	0	0%	100%	
180%	189%	0	0%	100%	
190%	199%	0	0%	100%	
		15			

Last 52 Weeks

From	To	Number of Associates	%	Cum. %	Histogram
0%	9%	0	0%	0%	
10%	19%	0	0%	0%	
20%	29%	0	0%	0%	
30%	39%	0	0%	0%	
40%	49%	0	0%	0%	
50%	59%	0	0%	0%	
60%	69%	0	0%	0%	
70%	79%	1	7%	7%	**********
80%	89%	2	13%	20%	**********
90%	99%	7	47%	67%	**********
100%	109%	4	27%	93%	**********
110%	119%	1	7%	100%	**********
120%	129%	0	0%	100%	
130%	139%	0	0%	100%	
140%	149%	0	0%	100%	
150%	159%	0	0%	100%	
160%	169%	0	0%	100%	
170%	179%	0	0%	100%	
180%	189%	0	0%	100%	
190%	199%	0	0%	100%	
		15			

The pre-defined report shown below provides a recap of the associate's progress throughout the year.

SSI Southeastern Distribution Center - Associates

Year 1999 - Ending: Saturday, January 29, 2000

Total Hours and Performance

Account: Hanley, Ruth

Period	Actual Hours			Earned Hours	% of Hours That Are Measured	Percent Performance
	Measured	Unmeasured	Total			
February	147.52	12.46	159.98	126.80	92.2	86.0
March	184.72	15.29	200.01	162.37	92.4	87.9
April	147.11	12.88	159.99	128.97	91.9	87.7
May	143.17	16.84	160.01	131.72	89.5	92.0
June	181.31	18.69	200.00	163.50	90.7	90.2
July	140.96	18.95	159.91	137.26	88.1	97.4
August	148.21	11.80	160.01	136.14	92.6	91.9
September	180.64	19.36	200.00	165.53	90.3	91.6
October	142.26	15.53	157.79	122.14	90.2	85.9
November	145.81	14.21	160.02	131.68	91.1	90.3
December	180.19	19.14	199.33	169.89	90.4	94.3
January	144.67	15.33	160.00	132.57	90.4	91.6
	1,886.57	190.48	2,077.05	1,708.57	90.8	90.6

The associate's performance is listed by month for a year. Alternatively, this report could have listed the associate's performance for each of the 52 weeks in the year.

The associate's performance and productivity by activity is shown on the following pre-defined Activity Performance report.

SSI Southeastern Distribution Center - Associates

Week Ending: Saturday, September 23, 2000

Activity Performance

Description		Units Produced	Actual Hours			Earned Hours	Units Per Hour		% Performance	% of Total Hours
			Measured	Unmeasured	Total		Actual	Net Standard		
Account: Baxter, Linda										
Put Away	Pallets	915	5.58		5.58	6.10	164.0	150.0	109.3	13.9
Picking	Cartons	1,505	27.40		27.40	26.08	54.9	57.7	95.2	68.5
Cycle Counting	SKU's	11		1.29	1.29		8.5			3.2
Breaks				2.50	2.50					6.2
Meetings				1.28	1.28					3.2
Training				1.29	1.29					3.2
Cleanup				0.67	0.67					1.7
Total of All Activities			32.98	7.03	40.01	32.18			97.6	100.0
Account: Bell, William										
Cycle Counting	SKU's	11		3.17	3.17		3.5			8.6
Order Entry	Lines	4,279	24.88		24.88	24.25	172.0	176.5	97.5	67.9
Pick Adjustments	Lines	31	3.57		3.57	3.75	8.7	8.3	105.0	9.7
Breaks				2.25	2.25					6.1
Meetings				1.36	1.36					3.7
Cleanup				1.42	1.42					3.9
Total of All Activities			28.45	8.20	36.65	28.00			98.4	100.0
Account: Boggs, Charlie										
Receive Common Carrier	Cartons	264	1.66		1.66	1.42	159.0	185.9	85.5	4.1
Recive Consolidator	Cartons	322	2.22		2.22	1.80	145.0	178.9	81.1	5.5
Put Away	Pallets	593	4.53		4.53	3.95	130.9	150.1	87.2	11.3
Picking	Cartons	2,329	24.38		24.38	28.63	95.5	81.3	117.4	60.9
Haul to Shipping	Pallets	141	4.72		4.72	4.35	29.9	32.4	92.2	11.8
Breaks				2.50	2.50					6.2
Total of All Activities			37.51	2.50	40.01	40.15			107.0	100.0

This report shows weekly totals for each activity that the associate performed. This report could have shown monthly, quarterly or yearly totals.

User-Defined Associate Reports

ProRep is used in many different types of businesses and operations. Therefore, ProRep provides for the creation of user-defined reports that are tailored to your organization's specific information needs and reporting style.

The user-defined report below shows the associates' performances in each of the company's work areas.

SSI Southeastern Distribution Center - Associates
Year 2000 - Ending: Saturday, January 27, 2001

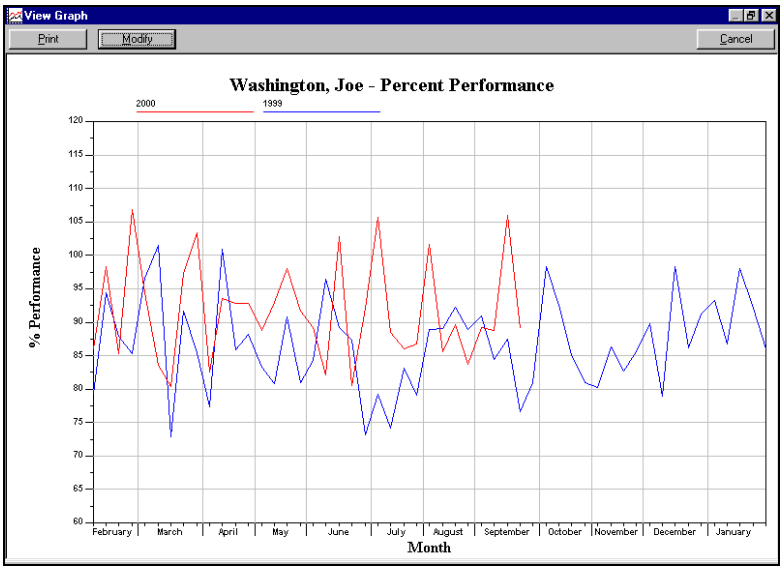
Percent Performance by Activity

	Receiving				Order Filling		Shipping		Data Entry			
Account	Common Carrier	Consol-idator	Small Ship-ment	Put-away	Picking	Haul to Ship-ping	Stage & Verify	Load-ing	Receipt Entry	Order Entry	Pick Adjust-ments	Total % Perfor-mance
Baxter, Linda				91.0	90.7							90.7
Bell, William										89.1	87.1	89.0
Boggs, Charlie	104.8	100.8		103.3	102.9	109.9						103.9
Carona, Maria									97.4	97.7	94.0	97.3
Gonzalez, Jose					94.8	93.4	95.4					94.6
Grubbs, John					77.5	78.3						77.6
Hanley, Ruth		93.1				92.7	92.1	93.2				92.8
McGuire, Carter					87.9	87.0	91.0	89.9				89.6
Pugmire, Charles					103.4	101.7	106.9	103.1				104.4
Rockford, June	95.0			94.0			93.8	95.9				94.7
Smith, Mary	95.1	92.8	90.3		91.9	94.6	96.3	93.0				93.5
Stillwell, Yolanda	104.3	108.0		105.7								105.9
Stuckey, Alice				108.3		104.7	107.0	106.5				106.5
Washington, Joe	91.5				91.1	93.9						91.7
Williams, Tom	113.3	111.8	106.4									112.3
All Accounts	104.2	104.7	102.0	101.8	90.9	97.1	97.5	97.2	97.4	92.8	90.4	96.5

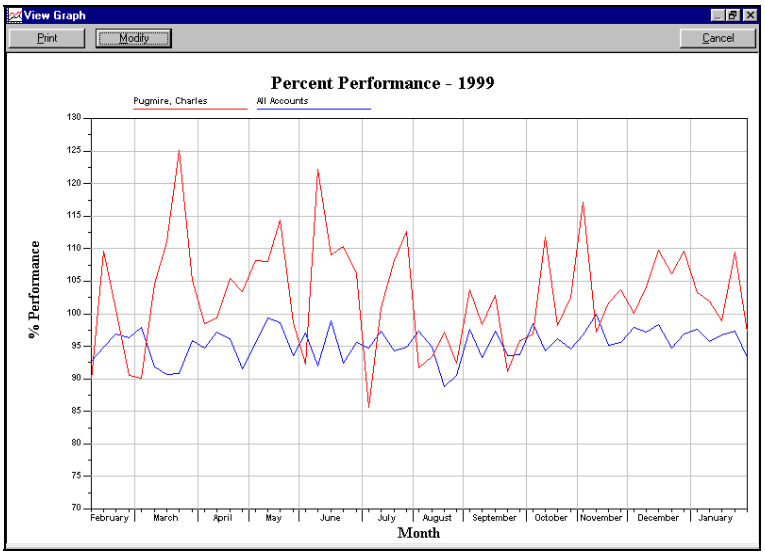
This report shows totals for a year. It could also be printed for a week, month or any specified number of weeks.

Pre-Defined Associate Graphs

One of ProRep's pre-defined graphs shows associate percent performance several different ways. The graph below shows an Associate's performance this year as compared to last year.



The following graph shows an associate's performance as compared to the average of all associates.



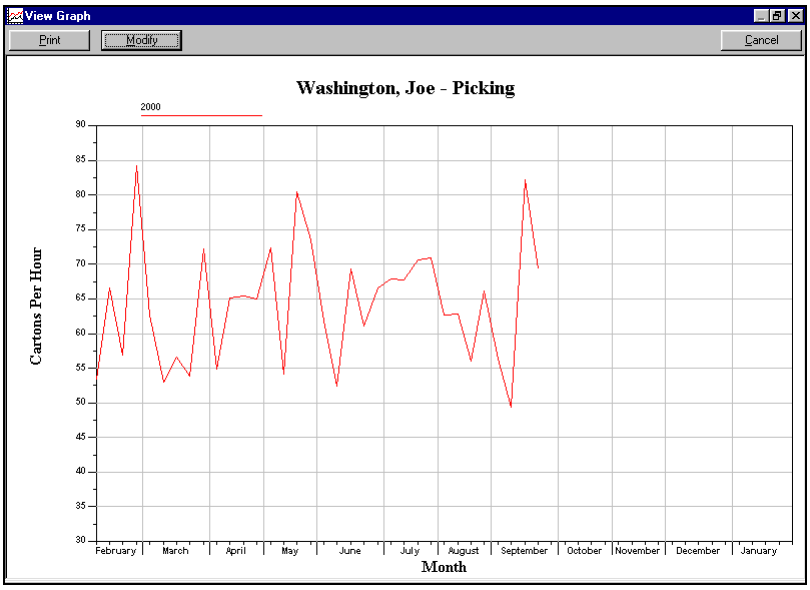
The best way to take advantage of the ProRep's graphing capability is by viewing the graphs on screen. The process is very intuitive, interactive and easy to use.

While a graph is being displayed on the screen, it can be printed by clicking the Print button. The best looking graphs are printed on color printers.

User-Defined Associate Charts

ProRep provides for the creation of user-defined charts that are tailored to your organization's specific information needs.

The user-defined chart below shows an associate's productivity in picking. This line graph plots the cartons picked per hour by week for a year.



Work Center Information

Daily performance, productivity and quality information about each activity performed in a work center is kept in a database for several years. This database is called the Work Center DataDiary. Reports and charts can be produced for any period of time stored in the database.

Pre-Defined Work Center Reports

The pre-defined report shown below shows hours worked, effectiveness and performance.

SSI Southeastern Distribution Center - Work Centers
Week Ending: Saturday, September 23, 2000

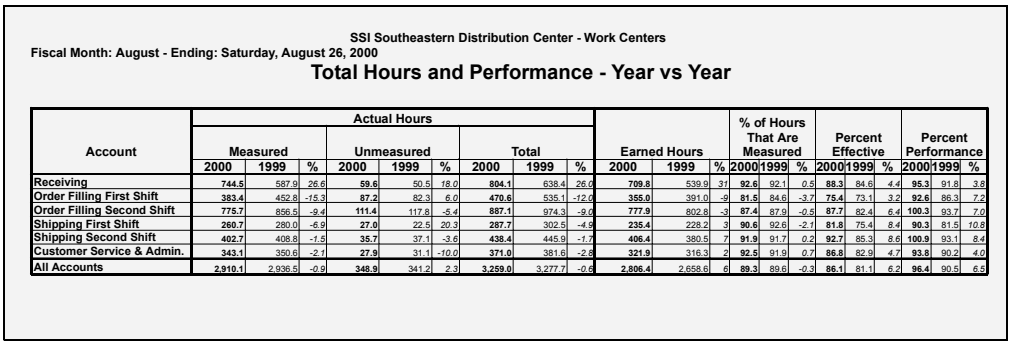
Total Hours and Performance

Account: Order Filling Second Shift

Date		Actual Hours			Earned Hours	% of Hours That Are Measured	Percent Effective	Percent Perfor-mance
		Measured	Unmeasured	Total				
Sunday	09/17/2000							
Monday	09/18/2000	38.34	5.11	43.45	36.92	88.2	85.0	96.3
Tuesday	09/19/2000	40.53	7.38	47.91	41.28	84.6	86.2	101.9
Wednesday	09/20/2000	39.71	3.50	43.21	40.01	91.9	92.6	100.8
Thursday	09/21/2000	39.29	4.68	43.97	40.55	89.4	92.2	103.2
Friday	09/22/2000	39.92	5.17	45.09	40.00	88.5	88.7	100.2
Saturday	09/23/2000							
		197.79	25.84	223.63	198.76	88.4	88.9	100.5

This report shows day-by-day information for a week. The report could also show week-by-week or month-by-month totals for any range of time.

Another pre-defined report shows the same information summarized by work center for a month.



SSI Southeastern Distribution Center - Work Centers

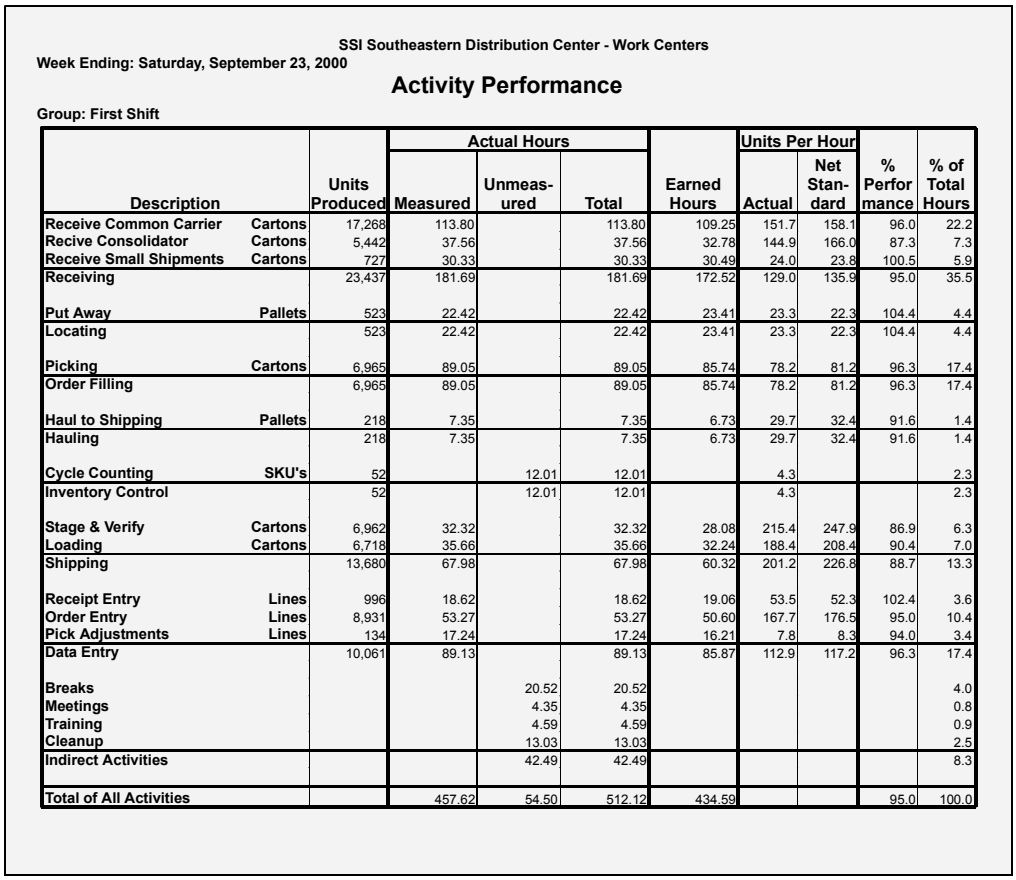
Fiscal Month: August - Ending: Saturday, August 26, 2000

Total Hours and Performance - Year vs Year

Account	Actual Hours									Earned Hours			% of Hours That Are Measured			Percent Effective			Percent Performance		
	Measured			Unmeasured			Total														
	2000	1999	%	2000	1999	%	2000	1999	%	2000	1999	%	2000	1999	%	2000	1999	%	2000	1999	%
Receiving	744.5	587.9	26.6	59.6	50.5	18.0	804.1	638.4	26.0	709.8	539.9	31	92.6	92.1	0.5	88.3	84.6	4.4	95.3	91.8	3.8
Order Filling First Shift	383.4	452.8	-15.3	87.2	82.3	6.0	470.6	535.1	-12.0	355.0	391.0	-9	81.5	84.6	-3.7	75.4	73.1	3.2	92.6	86.3	7.2
Order Filling Second Shift	775.7	856.5	-9.4	111.4	117.8	-5.4	887.1	974.3	-9.0	777.9	802.8	-3	87.4	87.9	-0.5	87.7	82.4	6.4	100.3	93.7	7.0
Shipping First Shift	260.7	280.0	-6.9	27.0	22.5	20.3	287.7	302.5	-4.9	235.4	228.2	3	90.6	92.6	-2.1	81.8	75.4	8.4	90.3	81.5	10.8
Shipping Second Shift	402.7	408.8	-1.5	35.7	37.1	-3.6	438.4	445.9	-1.7	406.4	380.5	7	91.9	91.7	0.2	92.7	85.3	8.6	100.9	93.1	8.4
Customer Service & Admin.	343.1	350.6	-2.1	27.9	31.1	-10.0	371.0	381.6	-2.8	321.9	316.3	2	92.5	91.9	0.7	86.8	82.9	4.7	93.8	90.2	4.0
All Accounts	2,910.1	2,936.5	-0.9	348.9	341.2	2.3	3,259.0	3,277.7	-0.6	2,806.4	2,658.6	6	89.3	89.6	-0.3	86.1	81.1	6.2	96.4	90.5	6.5

The report also compares this year's monthly totals to last year's. This style of report shows total information for all areas for any period of time.

Shown below is an Activity Performance report that shows weekly totals. It could have been printed with totals for a day, month, quarter, year or any user specified period of time.



SSI Southeastern Distribution Center - Work Centers

Week Ending: Saturday, September 23, 2000

Activity Performance

Group: First Shift

Description		Units Produced	Actual Hours			Earned Hours	Units Per Hour		% Performance	% of Total Hours
			Measured	Unmeas-ured	Total		Actual	Net Stan-dard		
Receive Common Carrier	Cartons	17,268	113.80		113.80	109.25	151.7	158.1	96.0	22.2
Recive Consolidator	Cartons	5,442	37.56		37.56	32.78	144.9	166.0	87.3	7.3
Receive Small Shipments	Cartons	727	30.33		30.33	30.49	24.0	23.8	100.5	5.9
Receiving		23,437	181.69		181.69	172.52	129.0	135.9	95.0	35.5
Put Away	Pallets	523	22.42		22.42	23.41	23.3	22.3	104.4	4.4
Locating		523	22.42		22.42	23.41	23.3	22.3	104.4	4.4
Picking	Cartons	6,965	89.05		89.05	85.74	78.2	81.2	96.3	17.4
Order Filling		6,965	89.05		89.05	85.74	78.2	81.2	96.3	17.4
Haul to Shipping	Pallets	218	7.35		7.35	6.73	29.7	32.4	91.6	1.4
Hauling		218	7.35		7.35	6.73	29.7	32.4	91.6	1.4
Cycle Counting	SKU's	52		12.01	12.01		4.3			2.3
Inventory Control		52		12.01	12.01		4.3			2.3
Stage & Verify	Cartons	6,962	32.32		32.32	28.08	215.4	247.9	86.9	6.3
Loading	Cartons	6,718	35.66		35.66	32.24	188.4	208.4	90.4	7.0
Shipping		13,680	67.98		67.98	60.32	201.2	226.8	88.7	13.3
Receipt Entry	Lines	996	18.62		18.62	19.06	53.5	52.3	102.4	3.6
Order Entry	Lines	8,931	53.27		53.27	50.60	167.7	176.5	95.0	10.4
Pick Adjustments	Lines	134	17.24		17.24	16.21	7.8	8.3	94.0	3.4
Data Entry		10,061	89.13		89.13	85.87	112.9	117.2	96.3	17.4
Breaks				20.52	20.52					4.0
Meetings				4.35	4.35					0.8
Training				4.59	4.59					0.9
Cleanup				13.03	13.03					2.5
Indirect Activities				42.49	42.49					8.3
Total of All Activities			457.62	54.50	512.12	434.59			95.0	100.0

Notice that the report was printed for the First Shift which is a user-defined group of work centers. Work Centers, Associates and Allocations can be assigned to any number of user-defined groups. For example, Order Filling First Shift can be on the First Shift Group and on the Total Order Filling Group.

Grouping: First Shift

Receiving

Order Filling First Shift

Shipping First Shift

Customer Service and Administration

Grouping: Total Order Filling

Order Filling First Shift

Order Filling Second Shift

User-defined Work Center Reports

User-defined reports can be created that analyze and track your organizations key statistics and indicators.

SSI Southeastern Distribution Center - Work Centers
Second Quarter of 2000 - Ending: Saturday, July 29, 2000

Overall Productivity

Group: All Accounts

	Receiving			Order Filling			Shipping				
Week Ending Date	Cartons	Hours	Cartons Per Hour	Cartons	Hours	Cartons Per Hour	Cartons	Hours	Cartons Per Hour	Total of All Hours	Cartons Picked PerTotal Hour
May 6, 2000	25,670	222.09	115.6	23,188	332.19	69.8	26,030	207.87	125.2	969.53	23.9
May 13, 2000	26,136	226.22	115.5	23,382	339.61	68.8	24,552	205.83	119.3	959.17	24.4
May 20, 2000	22,236	202.15	110.0	21,858	320.76	68.1	22,468	193.34	116.2	915.96	23.9
May 27, 2000	20,552	191.74	107.2	22,191	329.53	67.3	21,914	190.94	114.8	901.76	24.6
June 3, 2000	22,084	197.60	111.8	17,485	298.11	58.7	17,324	167.29	103.6	831.76	21.0
June 10, 2000	23,512	203.63	115.5	17,574	292.63	60.1	18,667	164.48	113.5	832.68	21.1
June 17, 2000	21,671	196.84	110.1	15,606	270.77	57.6	16,457	151.60	108.6	780.83	20.0
June 24, 2000	20,707	187.96	110.2	17,224	282.87	60.9	17,189	158.24	108.6	800.34	21.5
July 1, 2000	19,729	178.25	110.7	17,646	290.46	60.8	17,180	157.68	109.0	781.83	22.6
July 8, 2000	13,516	138.48	97.6	18,581	295.67	62.8	17,689	163.75	108.0	757.81	24.5
July 15, 2000	14,429	144.41	99.9	17,654	292.15	60.4	18,858	170.17	110.8	777.83	22.7
July 22, 2000	13,092	133.82	97.8	16,498	282.87	58.3	16,422	152.22	107.9	729.75	22.6
July 29, 2000	11,912	125.78	94.7	17,988	300.42	59.9	18,434	168.38	109.5	761.94	23.6
	255,246	2,348.97	108.7	246,875	3,928.04	62.8	253,184	2,251.79	112.4	10,801.19	22.9

Reports can be created that focus on a specific area like the user-defined receiving report shown below.

SSI Southeastern Distribution Center - Work Centers
Fiscal Months: February to September

Receiving Volume This Year vs. Last Year

Account: Receiving

	Receiving														
	Cartons									Hours			Cartons per Hour		
Period	Common Carrier			Consolidator			Small Shipments								
	2000	1999	%	2000	1999	%	2000	1999	%	2000	1999	%	2000	1999	%
February	**58,368**	48,068	*21.4*	**19,314**	16,748	*15.3*	**2,766**	2,451	*12.9*	**654**	583	*12.2*	**145.8**	142.1	*3*
March	**59,437**	72,722	*-18.3*	**21,842**	24,624	*-11.3*	**3,063**	3,534	*-13.3*	**711**	840	*-15.3*	**140.5**	146.9	*-4*
April	**54,056**	61,014	*-11.4*	**18,307**	18,240	*0.4*	**2,685**	3,058	*-12.2*	**616**	690	*-10.7*	**145.0**	146.4	*-1*
May	**69,896**	42,931	*62.8*	**21,364**	17,748	*20.4*	**3,334**	2,605	*28.0*	**752**	558	*34.8*	**150.4**	141.9	*6*
June	**79,636**	64,540	*23.4*	**24,219**	21,864	*10.8*	**3,848**	3,418	*12.6*	**862**	766	*12.5*	**148.6**	144.0	*3*
July	**36,531**	30,890	*18.3*	**13,829**	13,249	*4.4*	**2,589**	1,919	*34.9*	**484**	429	*12.9*	**136.6**	134.6	*1*
August	**59,839**	36,793	*62.6*	**18,760**	16,969	*10.6*	**3,052**	2,468	*23.7*	**663**	517	*28.2*	**147.7**	139.9	*6*
September	**71,880**	78,571	*-8.5*	**23,795**	25,275	*-5.9*	**3,083**	4,158	*-25.9*	**762**	896	*-14.9*	**151.8**	148.4	*2*
	489,643	435,529	*12.4*	**161,430**	154,717	*4.3*	**24,420**	23,611	*3.4*	**5,504**	5,279	*4.3*	**146.4**	144.0	*2*

With this style of report you can spot trends and compare results to the exact same period of time from the previous year

The following user-defined report provides a snapshot of how much unmeasured time there is in each area and shift.

SSI Southeastern Distribution Center - Work Centers
Year 2000 - Ending: Saturday, January 27, 2001

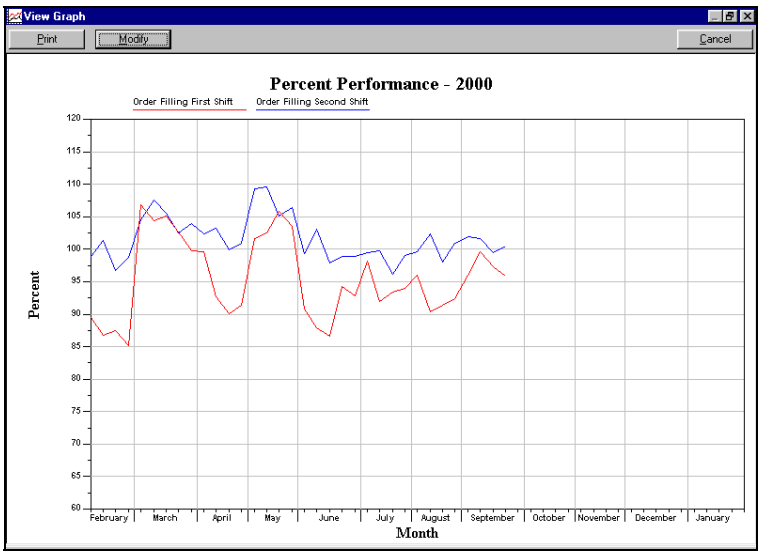
Unmeasured Hours Breakdown

Account	Training	Meetings	Cleanup	Cycle Counting	Breaks	Total Unmeasured Hours	Total of All Hours	Percent Unmeas-ured
Receiving	8.66	54.43	176.63		277.80	517.52	6,691.20	7.73
Order Filling First Shift	10.11	24.38	96.55	405.97	148.49	685.50	3,981.28	17.22
Shipping First Shift	24.05	20.73	69.71		102.79	217.28	2,494.26	8.71
Customer Service & Admin.	23.01	28.74	87.70		134.06	273.51	3,256.51	8.40
First Shift	65.83	128.28	430.59	405.97	663.14	1,693.81	16,423.25	10.31
Order Filling Second Shift	42.39	78.87	203.76	289.77	308.95	923.74	7,781.96	11.87
Shipping Second Shift	20.47	21.41	106.39		160.39	308.66	3,868.01	7.98
Second Shift	62.86	100.28	310.15	289.77	469.34	1,232.40	11,649.97	10.58
All Accounts	128.69	228.56	740.74	695.74	1,132.48	2,926.21	28,073.22	10.42

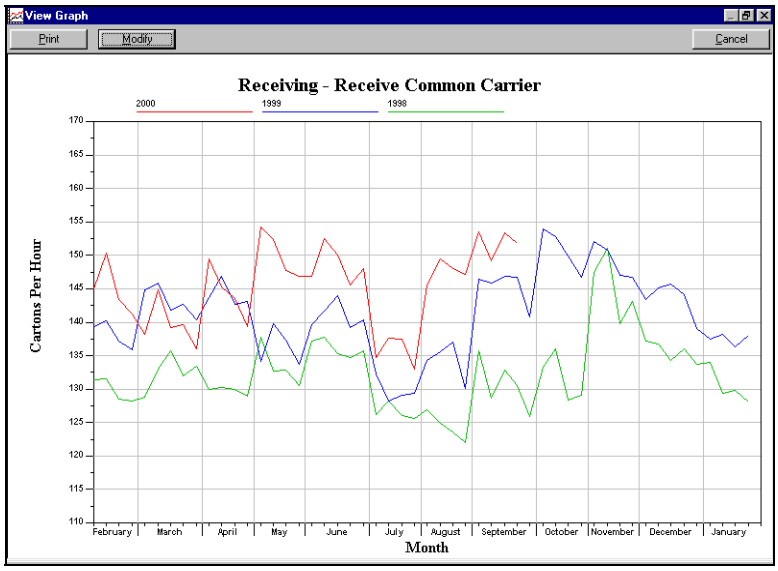
In addition to printing the reports, they can be viewed on screen and exported to Excel, Access, dBase and most other programs.

Pre-Defined Work Center Charts

Pre-defined graphs like the one shown below can be displayed or printed. This type of graph can show the performance of any work center or group of work centers. It can compare a work center's performance to last year, another work center or the average of all work centers.

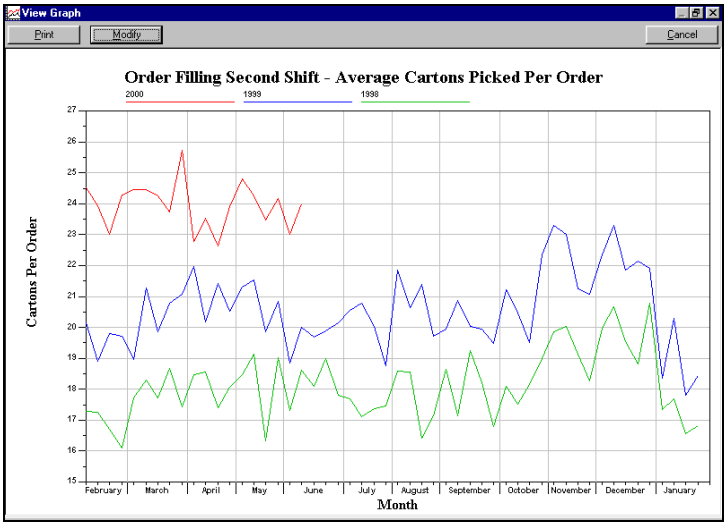


Other pre-defined graphs can plot an activity's performance, units, hours or units per hour as shown on the example below.



User-Defined Work Center Charts

User-defined graphs can be produced to plot statistics that are not included on any pre-defined graph. The user-defined line graph shown below plots the cartons per order over the past three years.



Allocation Information

The time spent and units produced can be tracked by allocation. Allocations are users of an organization's services. They can be customers, product lines or divisions of a company.

Both pre-defined and user-defined reports and graphs can be produced for allocations. Most of the pre-defined reports that are available for associates and work centers are also available for allocations.

The following pre-defined Activity Performance report shows the units and hours allocated to each customer for the month. The report includes a breakdown by activity.

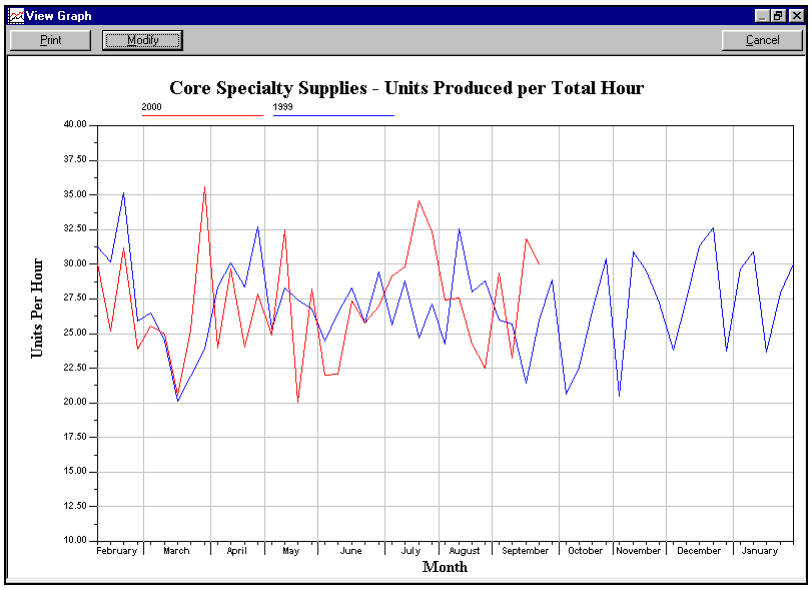
SSI Southeastern Distribution Center - Allocations

Fiscal Month: August - Ending: Saturday, August 26, 2000

Activity Performance

Description		Units Produced	Actual Hours: Measured	Actual Hours: Unmeas-ured	Actual Hours: Total	Earned Hours	Units Per Hour: Actual	Units Per Hour: Net Stan-dard	% Perfor mance	% of Total Hours
Account: Integrated Computer Products										
Receive Common Carrier	Cartons	18,023	118.90		118.90	116.58	151.6	154.6	98.0	23.1
Recive Consolidator	Cartons	3,559	24.00		24.00	23.33	148.3	152.6	97.2	4.7
Put Away	Pallets	2,768	18.54		18.54	18.44	149.3	150.1	99.5	3.6
Picking	Cartons	15,993	222.33		222.33	216.44	71.9	73.9	97.4	43.1
Haul to Shipping	Pallets	590	20.31		20.31	18.20	29.0	32.4	89.6	3.9
Cycle Counting	SKU's	193		23.67	23.67		8.2			4.6
Stage & Verify	Cartons	12,466	48.03		48.03	50.28	259.5	247.9	104.7	9.3
Loading	Cartons	70	8.46		8.46	8.46	8.3	8.3	100.0	1.6
Receipt Entry	Lines	1,147	22.74		22.74	21.98	50.4	52.2	96.7	4.4
Pick Adjustments	Lines	70	8.46		8.46	8.46	8.3	8.3	100.0	1.6
Total of All Activities		15,993	491.77	23.67	515.44	482.17	31.0	33.2	98.0	100.0
Account: Central Business Products										
Receive Common Carrier	Cartons	6,041	52.92		52.92	42.11	114.2	143.5	79.6	25.3
Put Away	Pallets	726	6.01		6.01	4.84	120.8	150.0	80.5	2.9
Picking	Cartons	4,742	84.07		84.07	66.74	56.4	71.1	79.4	40.2
Haul to Shipping	Pallets	131	5.63		5.63	4.05	23.3	32.3	71.9	2.7
Cycle Counting	SKU's	78		11.53	11.53		6.8			5.5
Stage & Verify	Cartons	7,076	37.04		37.04	28.54	191.0	247.9	77.1	17.7
Loading	Cartons	12	2.06		2.06	1.44	5.8	8.3	69.9	1.0
Receipt Entry	Lines	332	7.82		7.82	6.36	42.5	52.2	81.3	3.7
Pick Adjustments	Lines	12	2.06		2.06	1.44	5.8	8.3	69.9	1.0
Total of All Activities		4,742	197.61	11.53	209.14	155.52	22.7	30.5	78.7	100.0

The user-defined graph below plots the units produced per total hour this year as compared to last year.



Corporate Wide Information

If a company has several locations that use ProRep, a centralized corporate ProRep system can be established. Daily, weekly or monthly, data from each location's ProRep system is imported into the corporate ProRep system. From the corporate system, consolidated and comparative reports and graphs can be produced.

With a corporate ProRep system, user-defined reports like the following can be produced that show total company results.

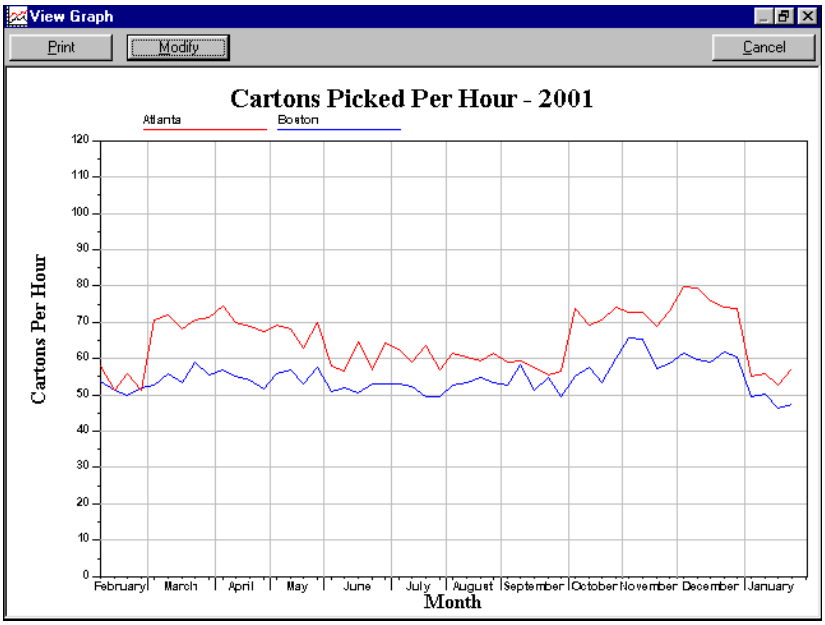
Spalding Global Logistic Services

Total Order Filling Summary

Week Ending: Saturday, July 06, 2002

Account	Order Filling														
	Orders			Cartons			Cartons Per Order			Total Hours			Cartons Per Total Hour		
	2002	2001	%	2002	2001	%	2002	2001	%	2002	2001	%	2002	2001	%
Atlanta	241	152	59	29,656	23,601	27	123.9	155.3	-20	1,459.25	1,095.25	33	20.5	21.5	-5
Los Angeles	651	369	76	27,523	28,541	-4	42.3	77.3	-45	985.33	1,865.66	-47	27.9	15.3	83
Boston	841	241	249	25,413	19,602	30	30.2	81.3	-63	1,456.14	959.33	52	17.5	20.4	-15
Denver	244	147	66	24,531	15,426	59	100.5	104.9	-4	1,641.24	985.45	67	14.9	15.7	-5
Chicago	541	254	113	22,145	26,541	-17	40.9	104.5	-61	1,456.35	1,748.75	-17	15.2	15.2	0
All Accounts	4,107	2,263	81	130,456	114,711	14	31.8	50.7	-37	8,698.31	8,402.44	4	15.0	13.7	10

The user-defined line graph below compares Atlanta's productivity to Boston's.



Chapter 4: How ProRep Works

This chapter introduces the general flow of information and setup of ProRep. This chapter should be reviewed by everyone that runs ProRep or uses its reports including supervisors and managers. The specifics and details of how to set up and use ProRep are discussed in the chapters that follow this one.

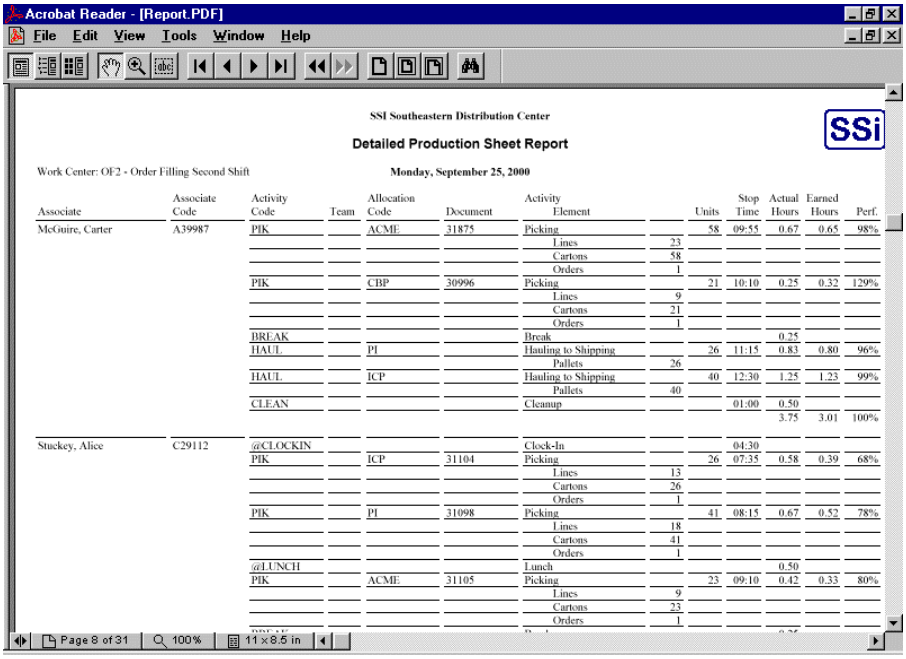
Overview

Every day, production data including units produced and hours worked is entered into a production sheet file. Optionally, the results of quality audits are also entered into a quality sheet file. These files contain data for that day only.

The production data can be entered into the production sheet file by several methods including:

- Centrally typing in data from handwritten production logs completed by each associate
- Associates scanning and/or keying their own data into a PC on a LAN at the completion of each activity
- Importing data from another computer system such as a warehouse management system (WMS)
- Importing data from a time & attendance system

After the day's data is entered, daily reports are printed. The reports can be printed to paper or to an Adobe Acrobat PDF file that can be viewed and printed by the supervisors and managers on their PCs. The production reports show each associate's and work center's performance for the day with a comparison to past performance. The quality reports show the results of the audits by associate and work center.


Acrobat Reader - [Report.PDF]
File Edit View Tools Window Help
SSI Southeastern Distribution Center
Detailed Production Sheet Report
Work Center: OF2 - Order Filling Second Shift
Monday, September 25, 2000
Page 8 of 31
100%
11 x 8.5 in

If necessary, the daily data is corrected and reports are reprinted. When, the reports are correct, the daily files are posted.

The data in the daily files is eventually moved into three separate databases called DataDiaries. The records in the DataDiaries consist of a series of datafields that hold the units and hours results of performing the various activities such as picking, packing and data entry.

- **Work Center DataDiary-** contains a record for each day for each work center account.
- **Associate DataDiary -** contains a record for each week for each associate account.
- **Allocation DataDiary** - contains a record for each week for each allocation account.

Each time that a daily production report is printed, the work center DataDiary is updated with the day's results. Posting the daily files updates all three DataDiaries.

User-defined datafields can also be added into the DataDiaries to hold data that is not entered into production sheets such as planned and budgeted numbers. The data for these fields can be entered into the DataDiaries through keying, or importing the data from a file created by a spreadsheet or other system.

Except for the daily reports, the DataDiaries supply all of the data that appears on reports and graphs. Up to 9 years of information can be kept in the DataDiaries.

There are a number of pre-defined reports and graphs that can be printed or viewed. The user can specify the span of time covered by the reports and several other criteria.

Users can also create customized reports and graphs. These user-defined reports and graphs can be used to focus on an area of interest. User-defined reports and graphs are often used to track productivity which is usually expressed in units per hour. The data for work centers, associates and allocations can also be consolidated and rolled up to produce reports that are specific to any area and level of management.

If ProRep is implemented in more than one facility, the daily or weekly results can be exported to a file that is then imported at corporate into a company-wide ProRep DataDiary. From this diary, comparative and cumulative reports and graphs can be produced.

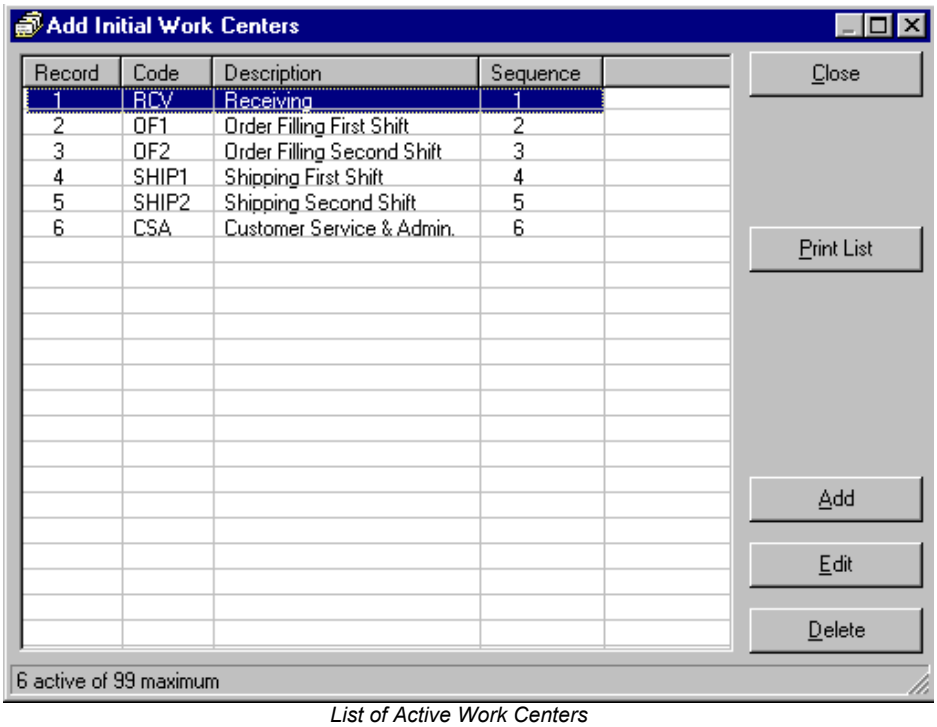
Tables

Most of the settings, parameters and information that customizes ProRep to work in your organization is accomplished by setting up a number of tables. Following is a list of the tables:

- Work Centers
- Associates
- Allocations
- Activities
- Elements
- Mistakes
- Types of Work
- Work Center Account Groups
- Associate Account Groups
- Allocation Account Groups
- Datafields

Work Center

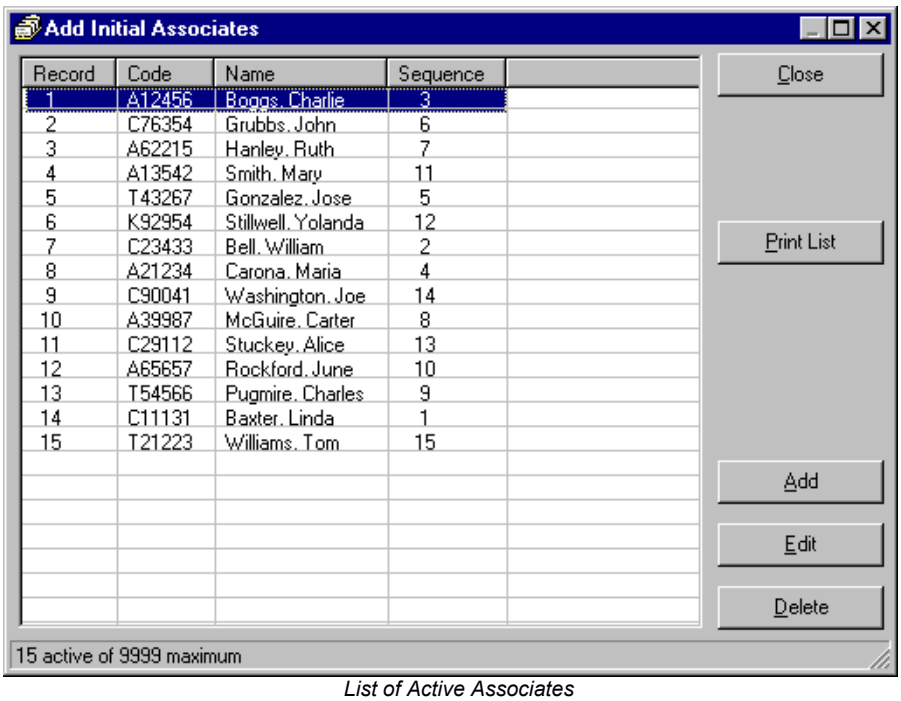
A Work Center is most often a combination of the work area and shift. Usually, a work center is set up for each supervisor. An account is automatically maintained in the work center DataDiary for each work center. There can be a maximum of 99 work centers.



List of Active Work Centers

Associates

An associate is any person for whom units and/or hours information is to be input into ProRep. An account is automatically maintained in the associate DataDiary for each associate.

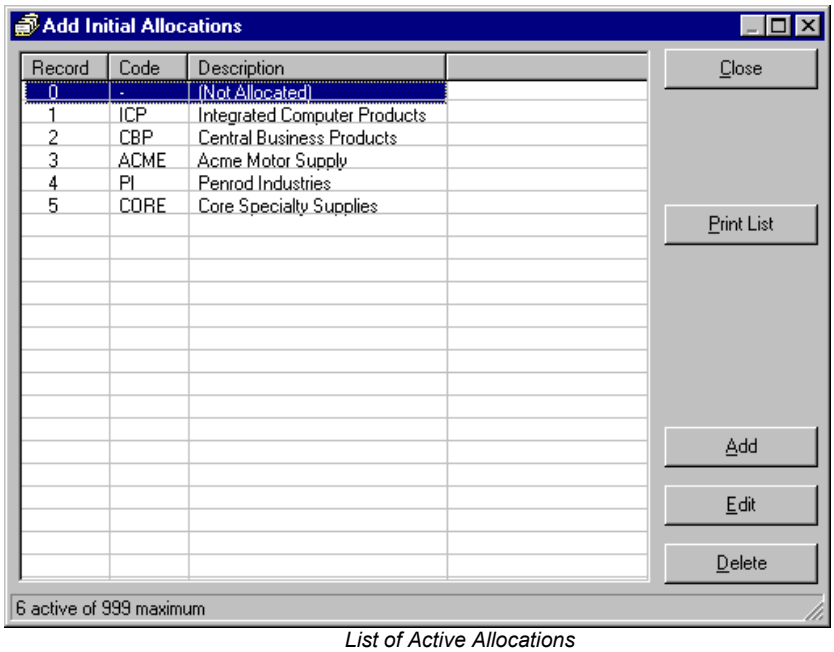


List of Active Associates

The number of associates in a ProRep system is limited to the number of associates for which a license has been purchased. A larger license for more associates can be purchased from Spalding Software.

Allocations

When daily production data is entered onto a production sheet or imported from another system, it can be allocated to a customer, product line or department.



List of Active Allocations

Following are some typical examples of allocations used in different industries:

- In a retailer's distribution center, the allocations are the merchandise departments.
- In a third party logistics center, the allocations are the companies for whom they perform distribution services.
- In a manufacturer's warehouse, the allocations are the different divisions of the company for whom they warehouse products.
- In a manufacturer's production facility, the allocations are the different products that are made.
- In a financial services company's operations center, the allocations are the companies for whom they process credit card payments.

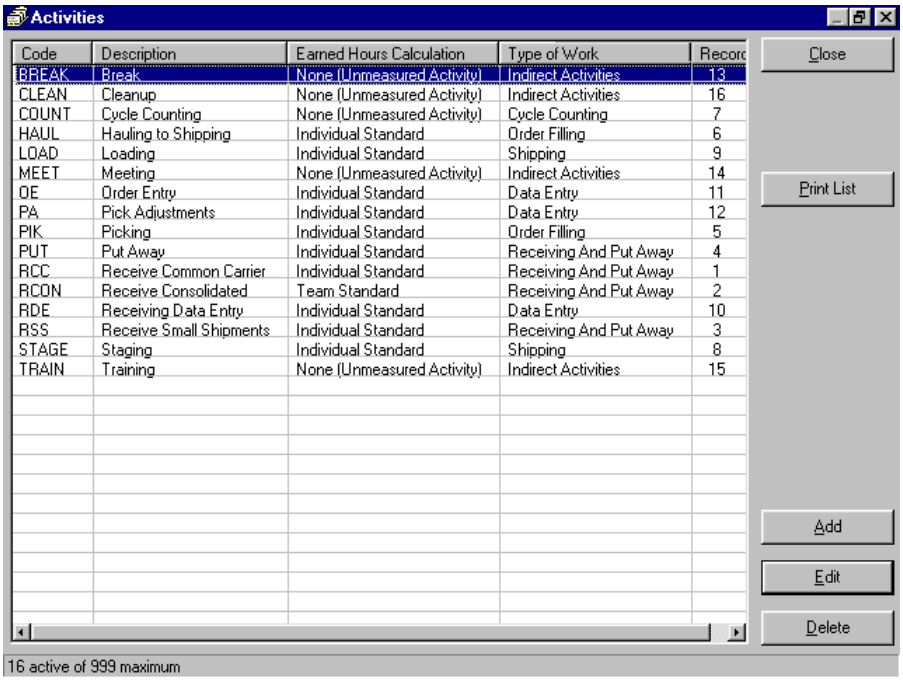
The use of allocations is optional. It is not necessary to set up any allocations. Not all organizations want to or need to track units, hours or cost by user of their services. Even for those organizations that would like to use the allocation feature, it is not always practical. For example, in a retailer's distribution center, if an associate is filling an order with several different types of merchandise, it might not be practical to record the time by merchandise department.

Even if the allocation feature is used, there will be some activities that can not be allocated. When an activity is set up, there is a setting that specifies whether it is allocated.

An account is automatically maintained in the allocation DataDiary for each allocation. One additional account is also maintained for all units, time, and cost that is not allocated. There can be a maximum of 999 allocation.

Activities

In ProRep, the associate's entire work day is accounted for. The time is assigned to various user-defined activities.


Activities
Code
Description
Earned Hours Calculation
Type of Work
Record
BREAK Break None (Unmeasured Activity) Indirect Activities 13
CLEAN Cleanup None (Unmeasured Activity) Indirect Activities 16
COUNT Cycle Counting None (Unmeasured Activity) Cycle Counting 7
HAUL Hauling to Shipping Individual Standard Order Filling 6
LOAD Loading Individual Standard Shipping 9
MEET Meeting None (Unmeasured Activity) Indirect Activities 14
OE Order Entry Individual Standard Data Entry 11
PA Pick Adjustments Individual Standard Data Entry 12
PIK Picking Individual Standard Order Filling 5
PUT Put Away Individual Standard Receiving And Put Away 4
RCC Receive Common Carrier Individual Standard Receiving And Put Away 1
RCON Receive Consolidated Team Standard Receiving And Put Away 2
RDE Receiving Data Entry Individual Standard Data Entry 10
RSS Receive Small Shipments Individual Standard Receiving And Put Away 3
STAGE Staging Individual Standard Shipping 8
TRAIN Training None (Unmeasured Activity) Indirect Activities 15
Close
Print List
Add
Edit
Delete
16 active of 999 maximum

List of Active Activities

There are several different ways in which the performance for an activity can be calculated:

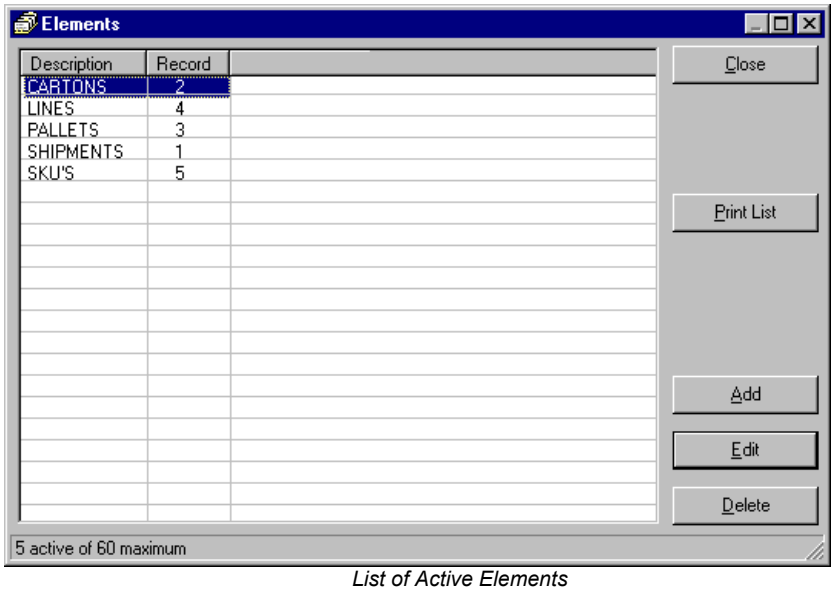
- **No Performance -** The activity does not have a standard. Examples are unmeasured activities like training, meeting and breaks.
- **Individual Performance -** The activity has a standard. The performance for each associate performing the activity is calculated separately. Most activities are of this type.
- **Team Performance -** The activity has a standard. The performance for a team of associates performing the activity is calculated by summing the units and time. Each member of the team receives the same performance. Team activities are common in receiving, shipping and other areas where associates cooperate to complete a job.
- **Past Average Performance -** The activity does not have a standard. The performance for the associate performing the activity is set to their past average performance on all activities over a specified range of prior weeks. Past average performance is only useful with an incentive system. For example, it allows an associate that normally earns an incentive to continue receiving an incentive while training a new associate.

- **Reflective Performance -** The activity does not have a standard. The performance for an associate performing the activity is set to the average performance one or more work centers. Reflective performance is only useful with an incentive system.

Activities for which performance is calculated are called measured activities. Activities for which performance is not calculated are called unmeasured activities. There can be a maximum of 999 activities.

Elements

When an activity is entered on an associate's production sheet, time and optionally units produced are also entered. The units produced are called elements. When an activity is set up the elements that will be recorded for the activity are specified. If the activity has standards, they are associated with its elements.



List of Active Elements

Activities that are measured nearly always have one or more elements for which units produced are recorded. Activities like breaks, meetings and cleanup that do not have standards usually do not have elements. However, activities that do not have standards can have elements. Following is an example of the elements for the Receive Common Carrier activity:

Activity Description: ***Receive Common Carrier***

Elements: *Shipments*

SKU's

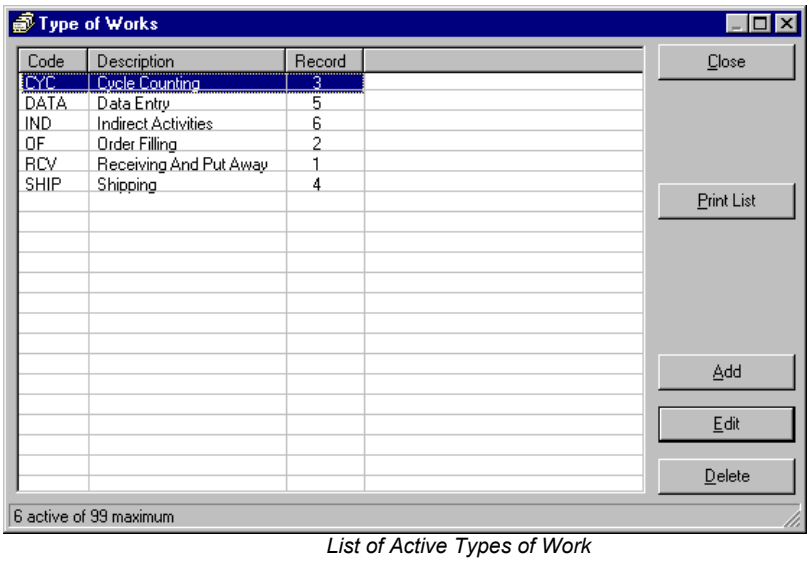
Lines

There can be a maximum of 60 elements.

Types of Work

An activity can be assigned a type of work for the purpose of grouping like activities. For example, some pre-defined reports are printed with the activities

listed in type of work order with subtotal breaks. If the Quality Measurement module is used, the results of audits are entered and tracked by type of work.



List of Active Types of Work

Following are two of the types of work in our example system:

Type of Work: ***Data Entry***

Activities: *Order Entry*

Pick Adjustments

Receiving Data Entry

Type of Work: ***Receiving and Put Away***

Activities: *Receive Common Carrier*

Receive Consolidated

Receive Small Shipments

Put Away

There can be a maximum of 99 types of work. The use of the type of work feature is optional. It is not necessary to set up types of work, although it is recommended. Also, it is not required that a type of work is declared for an activity.

Work Center Account Groups

A work center group is a list of two or more accounts in the work center DataDiary. Reports and graphs can be produced that show totals of all work centers in the group. Also, all of the work centers in the group can be listed individually on reports by selecting the group rather than by manually selecting each work center one at a time.

A work center can be included in any number of groups. There are a maximum of 999 work center groups. In the example below, the work center named Order Filling First Shift is on both the First Shift group and the Total Order Filling group.

Group Description: ***First Shift***

Accounts in Group: *Customer Service & Administration*

Order Filling First Shift ⇐
Receiving
Shipping Fist Shift

Group Description: ***Total Order Filling***
Accounts in Group: *Order Filling First Shift* ⇐
Order Filling Second Shift

Associate Account Groups

An associate group is a list of two or more accounts in the associate DataDiary. Reports and graphs can be produced that show totals of all associates in the group. Also, all of the associates in the group can be listed individually on reports by selecting the group rather than by manually selecting each associate one at a time.

ProRep automatically maintains an associate account grouping for each work center. When an associate is assigned to a work center, the associate account is added to their home work center's account grouping. If an associate's work center is changed, they are deleted from the old work center grouping and added to the new one.

Associate groups can be created for several different purposes. Same possible examples of associate groups are:

- Employment status such as full time, part time, seasonal and temporary.
- Length of service such as new hire, less than 1 year, 1 to 5 years, and 5 plus years.
- Job title such as picker, packer, material handler, fork truck operator and data entry operator.

Allocation Account Groups

An allocation group is a list of two or more accounts in the allocation DataDiary. Reports and graphs can be produced that show totals of all allocations in the group. Also, all of the allocations in the group can be listed individually on reports by selecting the group rather than by manually selecting each allocation one at a time.

Account groups can be created for several different purposes. Same possible examples of account groups are:

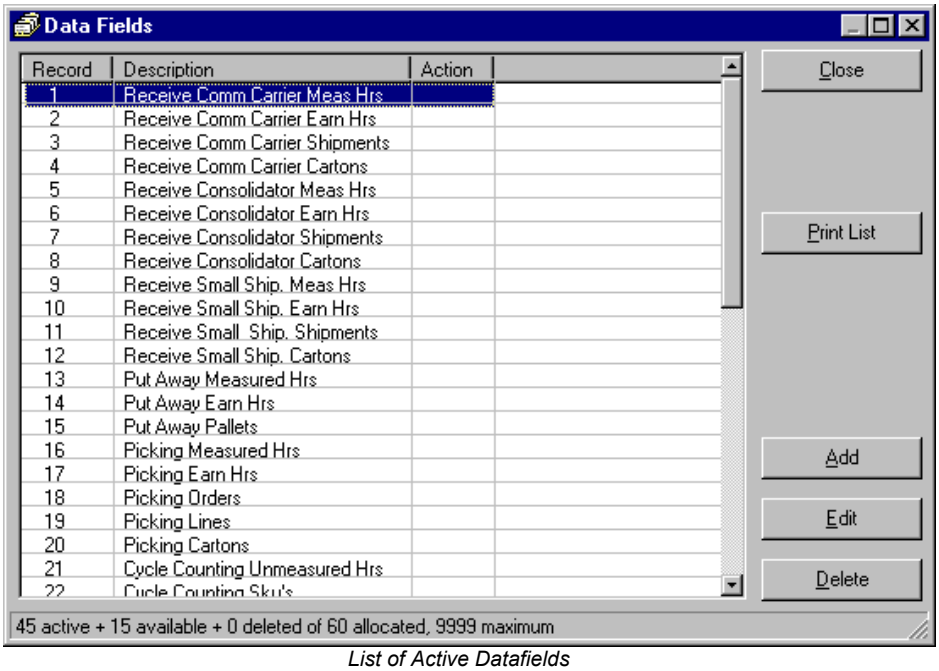
- In a retailer's distribution center, the merchandise divisions that the retail departments belong to such as shoes, furniture, sporting goods, and appliances.
- In a third party logistics center, the type of customer such as cost plus, revenue per unit and fixed fee.

Datafields

Datafields are the fields in the records of the work center, associate and allocation DataDiaries. Most of the datafields are automatically set up by ProRep when an activity such as picking, packing or data entry is added. The datafields are set up in each of ProRep's three DataDiaries to hold the results of performing these activities. This includes datafields for:

- Measured hours
- Unmeasured hours
- Earned hours
- Cost
- Datafields for each element (unit of measure) such as cartons, lines and pallets

If the quality measurement or incentive modules are used, datafields are also automatically set up by ProRep to track the results of these modules.



List of Active Datafields

User-defined datafields can be set up to hold data that is not entered into production sheets or otherwise produced within ProRep. Following are examples of typical information for which datafields can be established:

- Budgeted hours
- Planned units
- Actual payroll expense
- Hours from a time and attendance system
- Vacation hours

A user-defined datafield can be added to one of the DataDiaries or to all three DataDiaries. There can be a maximum of 9,999 datafields.

Both the automatically-defined and user-defined datafields can be included on user-defined reports and charts.

How Performance and Productivity are Measured

Performance is measured by comparing actual work output per period of time to a pre-defined expected output per period of time. This expected production rate is called a standard.

There are several methods that can be used for setting standards. The primary methods are:

- Time Studies - An engineered standard setting technique that uses timed observations of actual work as it is being performed that are analyzed and rated.
- Motion Studies - An engineered standard setting technique that uses tables of predetermined times to build a standard based on the defined sequence of movements involved in performing the work.
- Historical Analysis - Uses actual past results as the basis for standard.

There are two ways in ProRep to assign a standard to an activity:

- Manually enter the activity's standard that is developed using one of the aforementioned standards setting methods.
- Have ProRep automatically calculate the activity's standard based on its historical rate of production. Historical standards are recalculated at the end of each week and are based on average rate of production over the past 6 weeks (or other user-definable number of weeks).

Typically in a ProRep system, there are both measured activities and unmeasured activities:

- Measured Activities - are those jobs that have work standards. Typical examples of measured activities are receiving, put away, picking and shipping.
- Unmeasured Activities - are activities like break, meeting, training and other activities for which setting a standard is impossible or impractical.

Standards for measured activities can be entered and displayed as either units per hour or minutes per unit. The ProRep system administrator specifies the method. They are mathematically equivalent. For example:

60 Units per Hour = 1.000 Minutes per Unit

120 Units per Hour = .500 Minutes per Unit

The examples in this section use minutes per unit.

In the calculation of performance, ProRep uses some terms that have consistent definition among work measurement specialists. One of these terms is Earned Hours which is defined as the amount of time it should take to do a job based on the activity's standard. Earned hours are calculated by multiplying the units produced by the standard minutes per unit and converting the resulting earned minutes to earned hours. Following is an example:

Activity: Picking				
Element	Standard Minutes Per Unit	Units Produced	Earned Minutes	Earned Hours
Orders	2.500	8	20.0	.333

Lines	1.000	45	45.0	.750
Cartons	0.500	200	10.0	.167
			75.0	1.250
Total Earned Hours = 1.25				

Performance is calculated by dividing the earned hours by the actual time (measured hours) spent performing the activity and converting the result to a percentage.

% Performance = Earned Hours / Measured Hours x 100%

In the picking activity example above, the associate worked on the activity for 1.50 measured hours. Therefore, the performance is 83% as shown below:

1.25 Earned Hours / 1.50 Measured Hours x 100% = 83% Performance

Performance is a good measurement to use when evaluating and comparing associates. It is primarily a measure of the effort and skill that associates use in performing the tasks that they are assigned.

Another measure that ProRep uses is Effectiveness. It is calculated by dividing the earned hours by the total hours for the day. Effectiveness simultaneously takes into account the performance on measured activities and the percent of the day spent on unmeasured activities.

% Effective = Earned Hours / (Measured Hours + Unmeasured Hours) x 100%

For example, a work center had a total of 70 measured hours, 10 unmeasured hours and 61 earned hours. The percent performance of the work center is 87% while the percent effective is 76% as shown below:

61 Earned Hours / (70 Measured Hours + 10 Unmeasured Hours) = 76% Effective

There are two ways to increase effectiveness. One way is to increase the percent performance on measured activities. The other way is to reduce the percent of time spent on unmeasured activities.

Effectiveness should rarely be used to evaluate and compare associates. In most situations, the associates have little control of how they spend their time. They work on the activities to which they are assigned.

Effectiveness is primarily a measure used to evaluate supervisors and managers. In many situations it can be used to monitor how well supervisors and managers utilize their manpower resources. Sometimes, spending time on unmeasured activities has an initial negative impact on effectiveness but results in a long term positive impact. For example, spending additional time on training and supervision may eventually

result in performance increases that more than compensate for the increase in unmeasured time.

In some situations, using effectiveness to evaluate supervisors and managers is not advised. For example, spending more time on safety meetings or cleanup will probably lower effectiveness. However, these may be beneficial and worthwhile activities.

Using performance and effectiveness are very convenient for evaluating associates and supervisors because they summarize the results of all activities down to single numbers. They primarily provide information about the amount of diligence, effort and skill associates and supervisors use to get the job done.

However, performance and effectiveness do not provide a true measure of productivity. For example, an automobile assembly line's speed is set to produce cars at a constant rate. If the methods and standards are changed so that fewer assemblers are required, the performance may remain the same or even go down. However, if the speed of the assembly line is not changed, the same number of cars per hour will come off the end of the assembly line and thus the cars produced per man hour will increase.

Productivity is usually measured as units per hour. It is the measurement that is most often used by management to track results. In fact, as we move up through an organization the more managers rely on monitoring overall productivity and the less they rely on monitoring performance.

ProRep provides pre-defined reports that list all activities and their respective units per hour. However, if there are 30 or more activities, as is typical, it becomes difficult to judge the overall productivity of an area or facility. Therefore, most ProRep users create several user-defined reports and graphs that focus on particular areas and key operational statistics.

This Page Intentionally Left Blank

Chapter 5: Creating a New ProRep System

This chapter is step-by-step guide for setting up an new ProRep system. After the new system is added, it will have all of the files and tables that are needed by ProRep. For the most part, the files and tables will be empty. The chapters that follow describe the details of how to customize ProRep to fit the needs of your operation.

Preparations Before Adding a New System

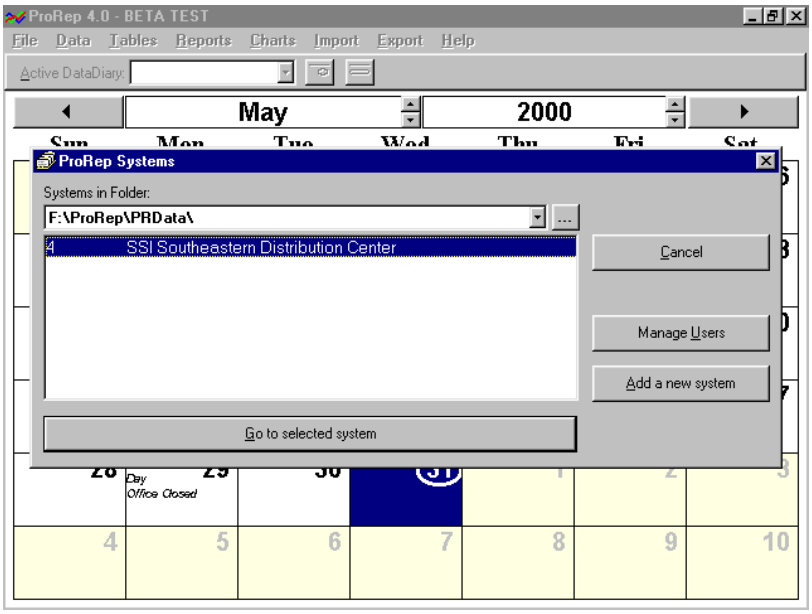
Spending a little time gathering some information and organizing it will make the process of starting a new ProRep System go more smoothly and quickly. Below is a list of recommended items to have on hand before starting.

- Copy or description of the type and structure of your organization's fiscal calendar.
- List of Work Centers and Supervisor Names
- List of Associate Names, Numbers, and Home Work Centers
- List of Allocations, if time is to be allocated to customers, divisions of the organization, merchandising departments, etc.
- List of Activities, Activity Codes, Units of Measure, and Standards
- List of General Categories, (examples: Receiving, Shipping, Picking) to which activities will be assigned.

Adding a New System

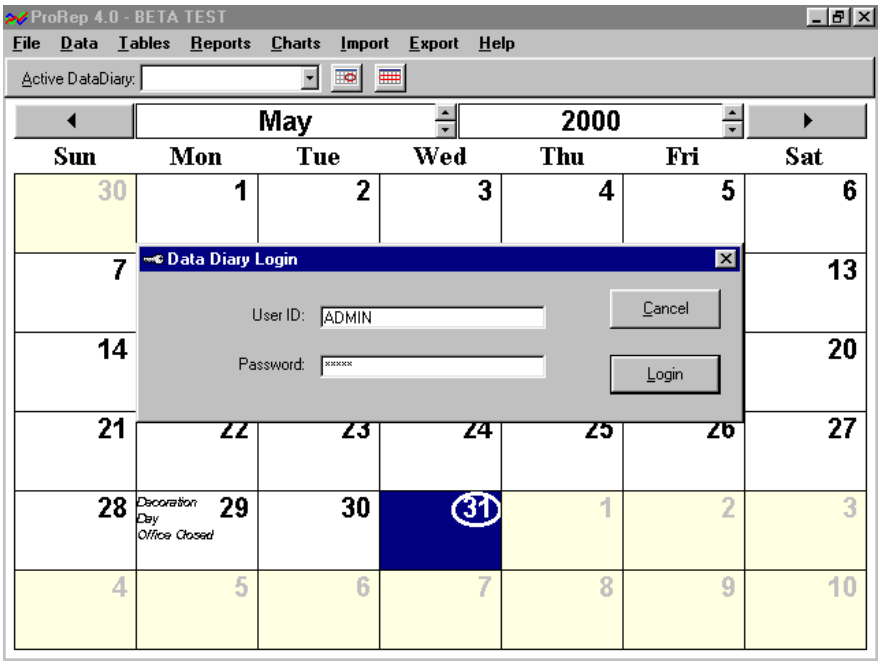
To start a new ProRep system, from the Windows desktop, start ProRep by double clicking on the ProRep icon.

A window is displayed that lists the ProRep systems that are in the default ProRep folder.



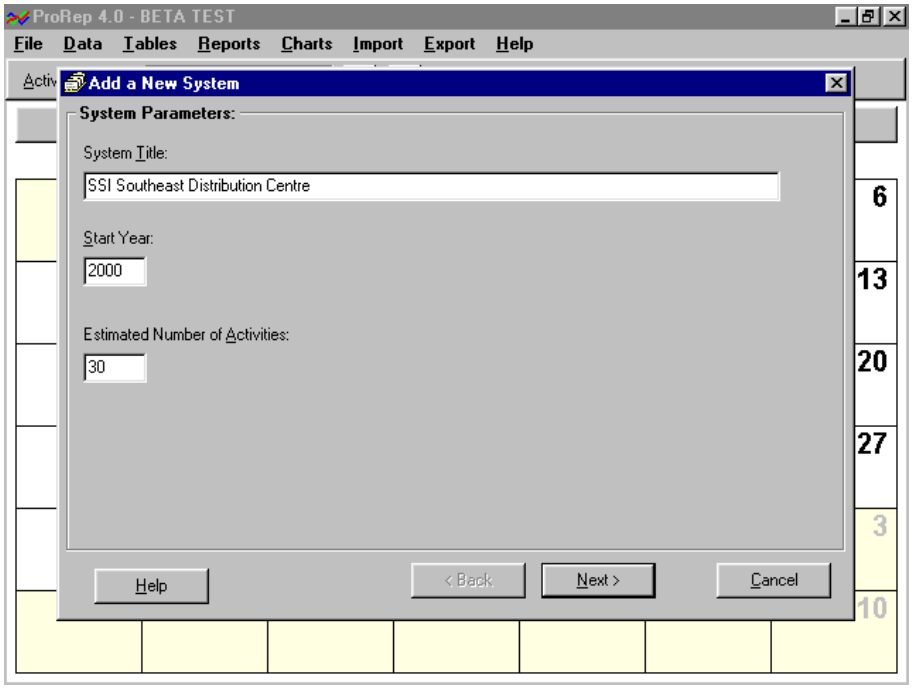
The ProRep system titled "SSI Southeastern Distribution Center" is a sample system that was installed along with the ProRep software.

To start a new system click the Add =New System Button.



A password is required to add a system. When ProRep is installed an administrator level password is automatically set up with the user ID of ADMIN and the password is ADMIN.

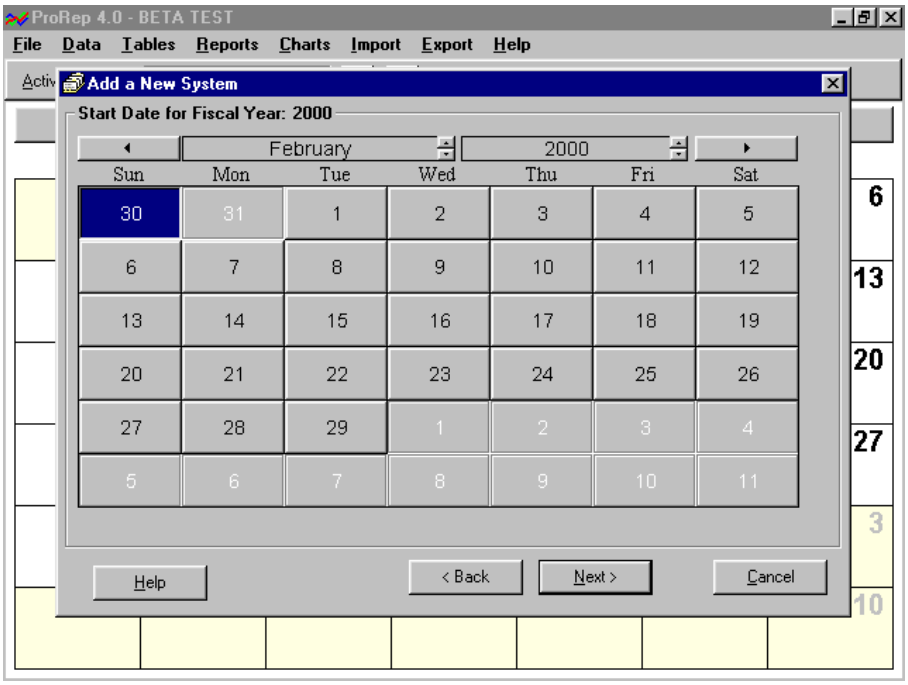
Click Login to add a new system.



Enter the following information:

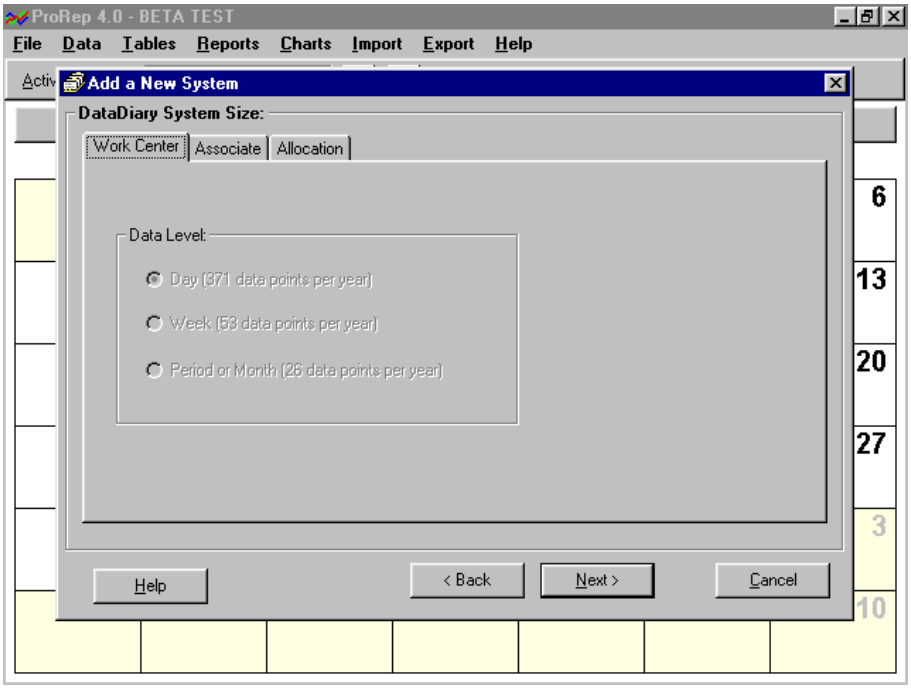
- **System Title**-The text to appear at the top of all reports. This is usually the company name.
- **Start Year**-The first fiscal year to include in the ProRep Database. This is usually the current year.
- **Estimated Number of Activities**-This can be changed after the system is set up.

Click Next to continue.

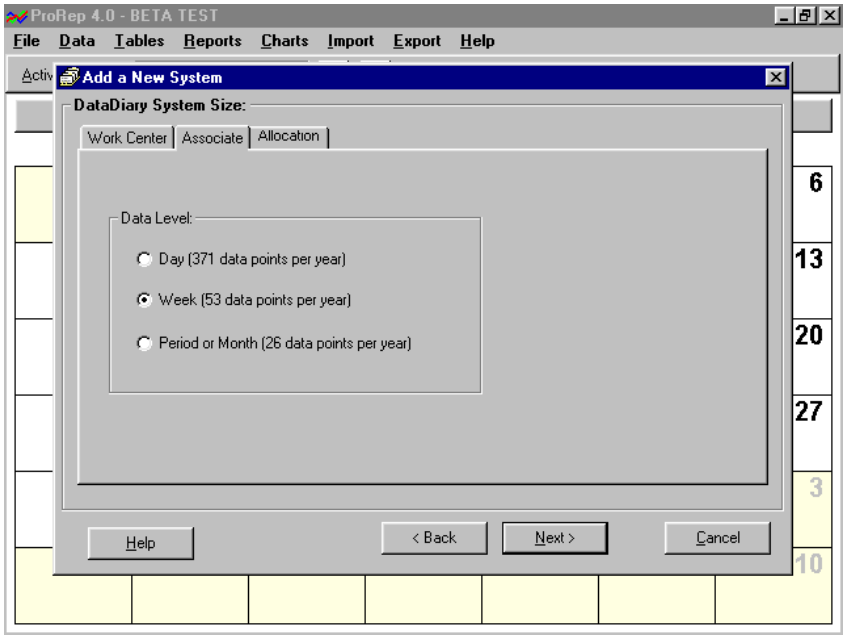

ProRep 4.0 - BETA TEST
File Data Tables Reports Charts Import Export Help
Add a New System
Start Date for Fiscal Year: 2000
February
2000
Sun Mon Tue Wed Thu Fri Sat
30 31 1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 1 2 3 4
5 6 7 8 9 10 11
Help
< Back
Next >
Cancel

Select the first date in the fiscal year and click Next to continue.

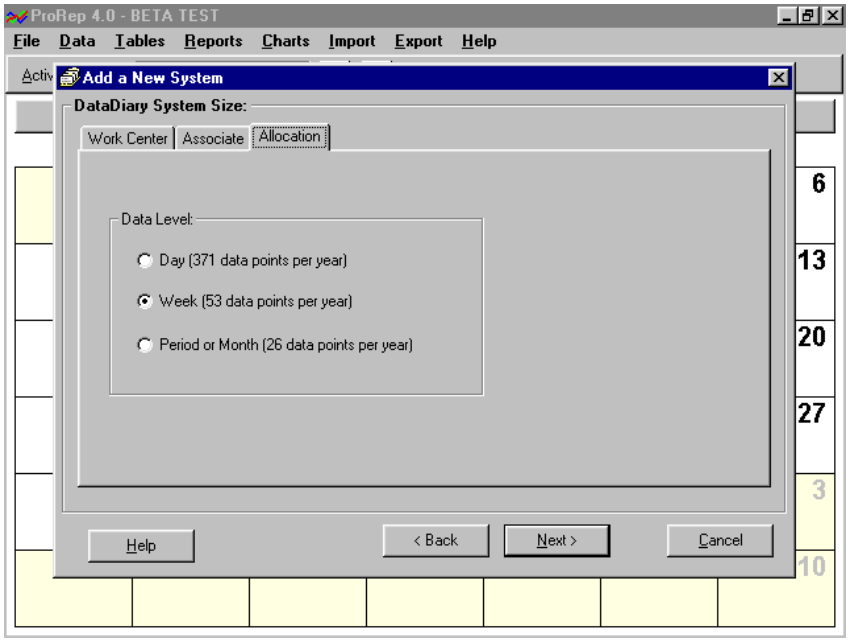
The following page of the wizard has three tabs.



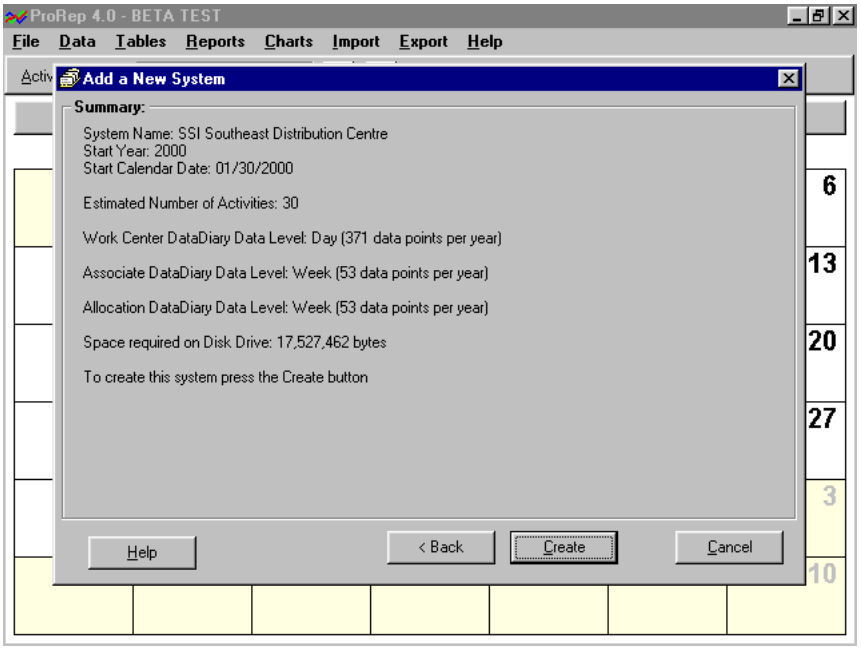
The work center DataDiary's data level can not be selected. It is always daily. Click the associate tab to continue.


ProRep 4.0 - BETA TEST
File Data Tables Reports Charts Import Export Help
Add a New System
DataDiary System Size:
Work Center Associate Allocation
Data Level:
Day (371 data points per year)
Week (53 data points per year)
Period or Month (26 data points per year)
Help
< Back
Next >
Cancel

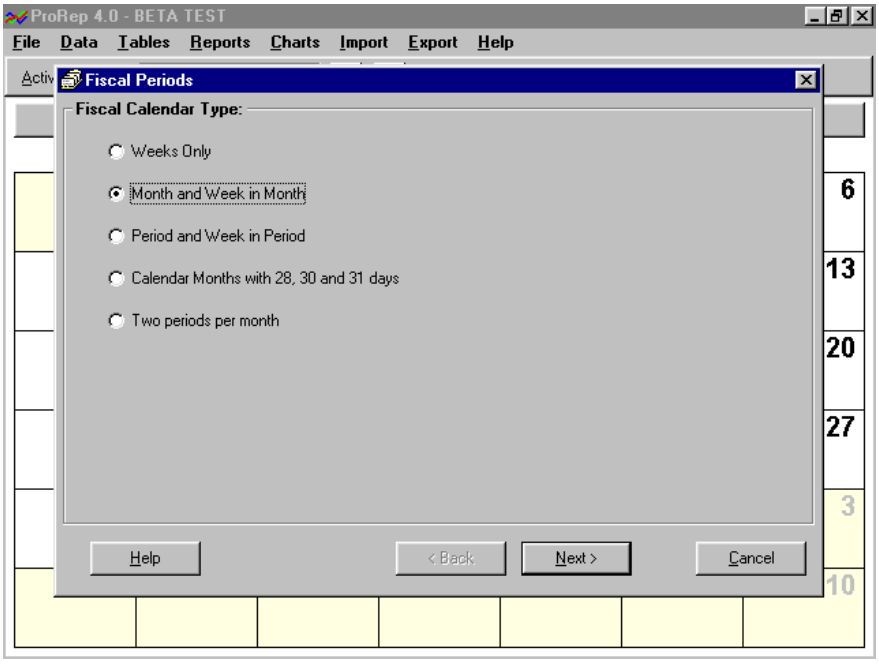
The associate DataDiary's data level can be selected. The most common data level used is weekly; if unsure of the of the desired level use the default selection of weekly. Select the desired data level and click the allocation tab.


ProRep 4.0 - BETA TEST
File Data Tables Reports Charts Import Export Help
Add a New System
DataDiary System Size:
Work Center Associate Allocation
Data Level:
Day (371 data points per year)
Week (53 data points per year)
Period or Month (26 data points per year)
Help
< Back
Next >
Cancel

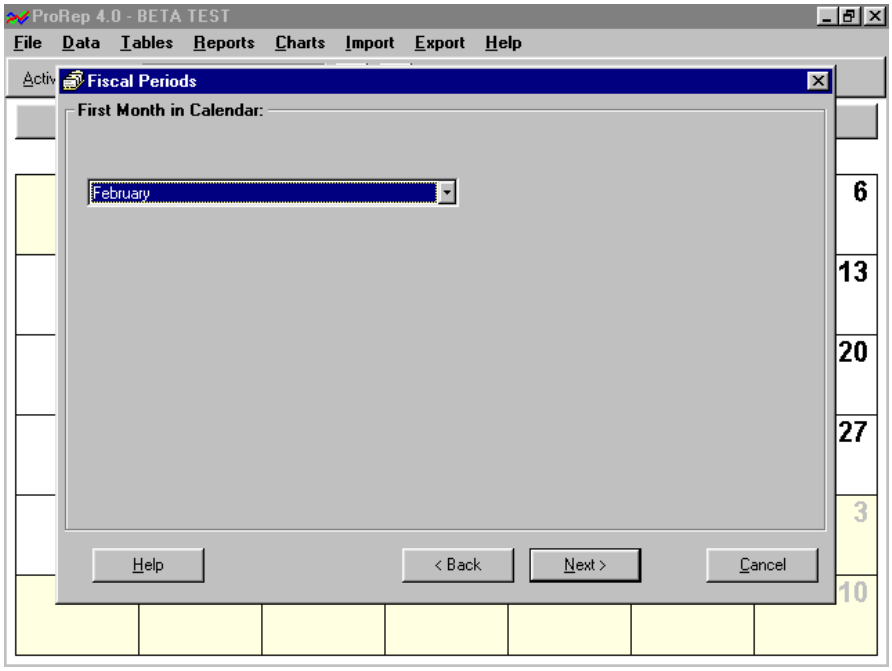
The allocation DataDiary's data level can be selected. The most common data level used is weekly; if unsure of the of the desired level use the default selection of weekly. Select the desired data level and click next to continue.


ProRep 4.0 - BETA TEST
File Data Tables Reports Charts Import Export Help
Add a New System
Summary:
System Name: SSI Southeast Distribution Centre
Start Year: 2000
Start Calendar Date: 01/30/2000
Estimated Number of Activities: 30
Work Center DataDiary Data Level: Day (371 data points per year)
Associate DataDiary Data Level: Week (53 data points per year)
Allocation DataDiary Data Level: Week (53 data points per year)
Space required on Disk Drive: 17,527,462 bytes
To create this system press the Create button
Help
< Back
Create
Cancel

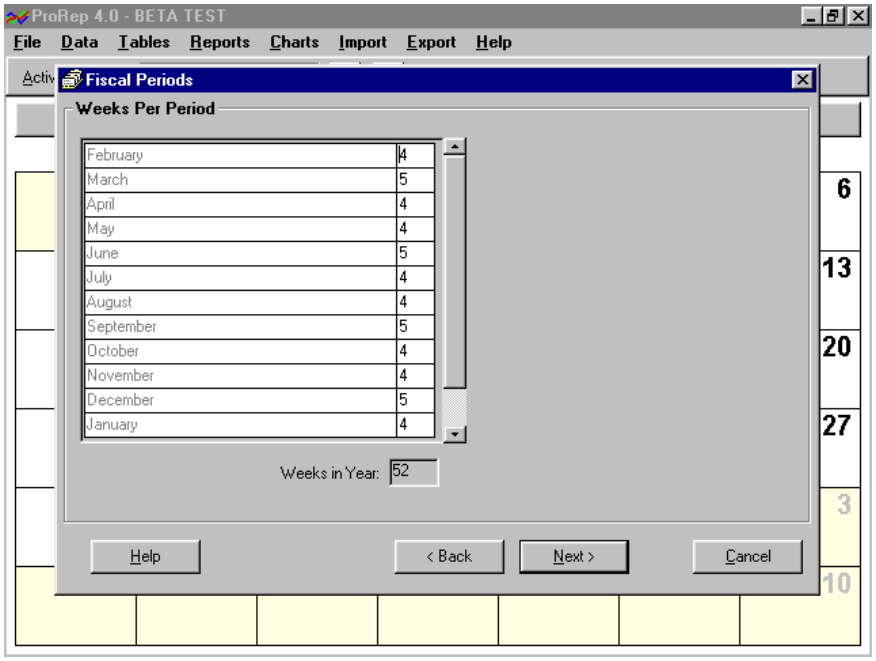
All of the selections that have been made are displayed in this dialog box. Click Back to change a setting. Click Create to accept these system settings. The fiscal calendar settings dialog is displayed.


ProRep 4.0 - BETA TEST
File Data Tables Reports Charts Import Export Help
Fiscal Periods
Fiscal Calendar Type:
Weeks Only
Month and Week in Month
Period and Week in Period
Calendar Months with 28, 30 and 31 days
Two periods per month
Help
< Back
Next >
Cancel

ProRep supports five different types of fiscal calendars. Month and Week in Month is the most common type. Select the type of fiscal calendar by clicking on the radio button and click next.

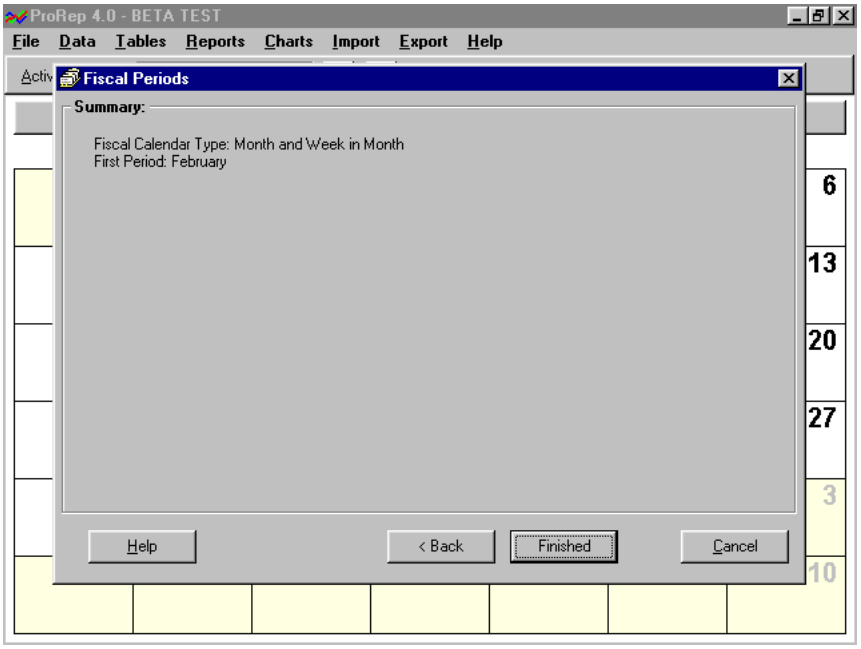


A fiscal calendar can start in any month. Select the first month in the calendar and click Next.



The number of weeks in each period is specified. They must total 52. Select the number of weeks in each period and click Next.

If the current fiscal year is a 53 week year, set the fiscal calendar to 52 weeks. After the new system has been set up, maintain the fiscal calendar as described in Chapter 6 and change the number of weeks in the year from 52 to 53.



The last page of the wizard displays the selected settings. To make changes click Back. Click Finished to create a new system.

Fiscal Calendar settings can be changed once a system is up and running. Be sure to read Chapter 6 before changing any fiscal calendar settings.

Customizing ProRep to Your Needs

Most of the settings, parameters and information that customizes ProRep to work in your organization is accomplished by setting up a number of tables. Following is a list of the tables:

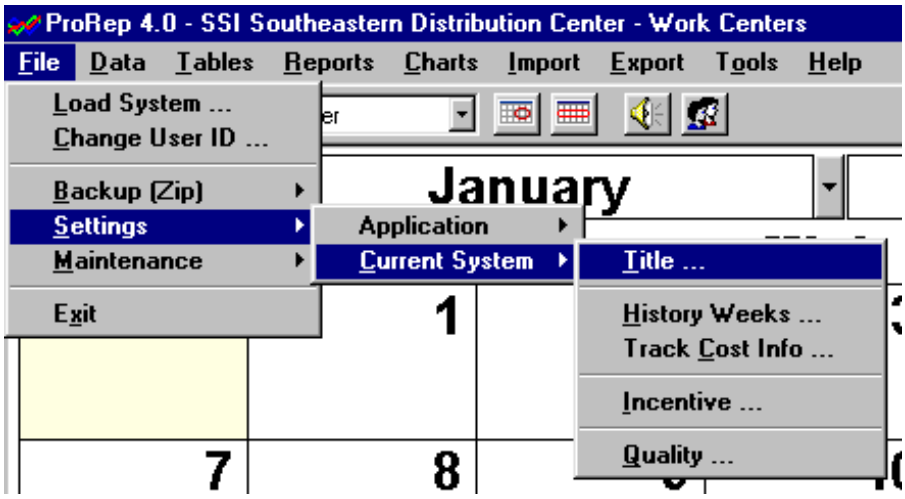
- Work Centers
- Associates
- Allocations
- Activities
- Elements
- Types of Work
- Work Center Account Groups
- Associate Account Groups
- Allocation Account Groups
- Datafields

Chapter 6 discusses Work Centers, Associates, Allocations, Groupings, and Datafields at length. Chapter 7 discusses Activities Elements and Types of Work at length. Chapters 8, 9, 10, and 11 describe in detail how to get data into ProRep.

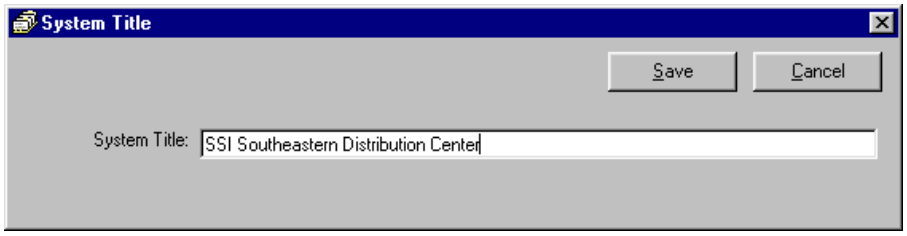
User Defined Reports and Graphs are explained in Chapters 16 and 17. It is recommended that all of the chapters mentioned above be read before starting to use your new system.

Changing the System Title

The system title can be changed after the system has been set up. Select file, Settings, Current System, Title.



The following dialog box will be displayed. Enter the new system title and click Save.



This Page Intentionally Left Blank

Chapter 6: Creating and Maintaining the Tables

This chapter discusses how to set up and edit the following tables:

- Work Centers
- Associates
- Allocations
- Groups of work centers, associates and allocations
- Datafields in the DataDiaries
- Fiscal Calendar used by the DataDiaries

There are other tables in ProRep in addition to those listed above. They are discussed in the next two chapters in the manual.

Chapter 7 titled *Setting up Activities* discusses:

- Activities
- Elements
- Types of Work
- Mistakes

Chapter 8 titled *User-Defined Formulas and Expressions* discusses*:*

- Expressions

Work Centers

A Work Center is most often a combination of the work area and shift. Following are the work centers in our example system:

- Receiving
- Order Filling First Shift
- Order Filling Second Shift
- Shipping First Shift

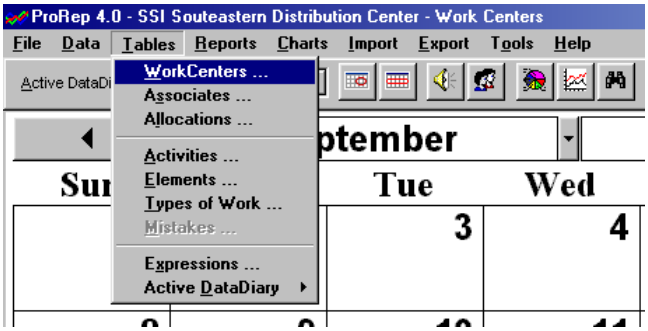
- Shipping Second Shift
- Customer Service and Administration

Usually, a work center is set up for each supervisor. An account is automatically maintained in the work center DataDiary for each work center. There can be a maximum of 99 work centers.

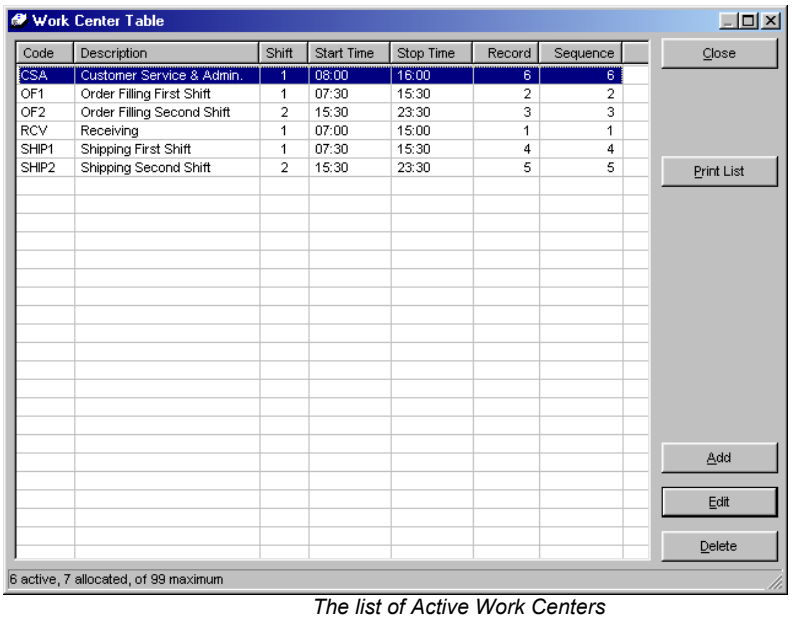
Adding or Editing a Work Center

To set up a new or edit an existing work center, select **Tables > Work Centers.**

.

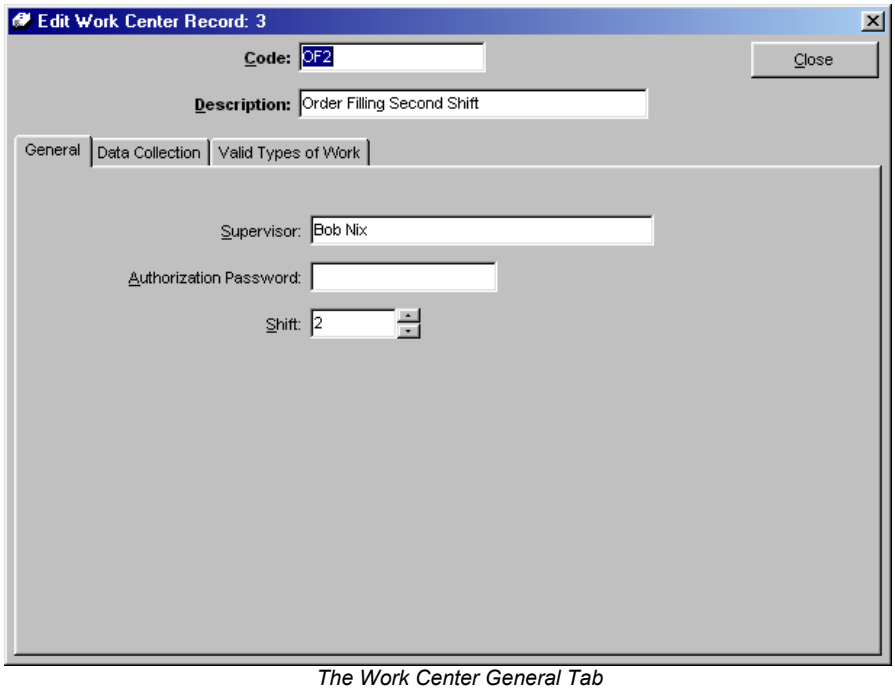


A list of previously defined work centers is displayed.


Work Center Table
Code Description Shift Start Time Stop Time Record Sequence
CSA Customer Service & Admin. 1 08:00 16:00 6 6
OF1 Order Filling First Shift 1 07:30 15:30 2 2
OF2 Order Filling Second Shift 2 15:30 23:30 3 3
RCV Receiving 1 07:00 15:00 1 1
SHIP1 Shipping First Shift 1 07:30 15:30 4 4
SHIP2 Shipping Second Shift 2 15:30 23:30 5 5
Close
Print List
Add
Edit
Delete
6 active, 7 allocated, of 99 maximum

The list of Active Work Centers

To add a new work center, click the **Add** button. To edit an existing work center, click on the work center in the list and click the **Edit** button.



The Work Center General Tab

Specifying the Work Center's Identification Code

Enter a code that uniquely identifies this work center. The code can be any combination of up to 10 letters and numbers. The work center's code is primarily used when entering data on production sheets. Therefore, it should be short but easily recognizable.

Entering the Work Center's Description

Enter a description of up to 30 characters. Typically the description consists of the work area name and shift, if applicable. **Caution:** If the supervisor of this area is re-assigned to another work area, do not change the description of this work center. Instead, change the name of the supervisor assigned to this work center.

Specifying the Work Center's Supervisor

The work center's Supervisor is entered on the General tab. If a new supervisor is assigned to this area, change the name of the supervisor. Do not change the description of this work center.

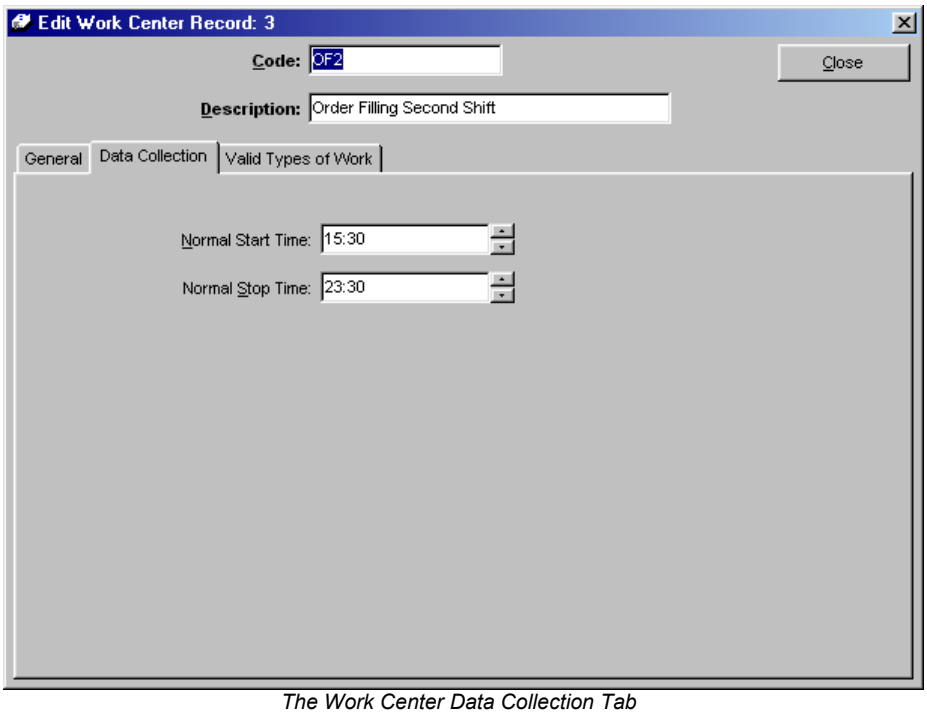
Specifying the Password for Approving Production Sheets

The Authorization Password on the General tab is entered when approving a day's production sheets for posting. The process of approving production sheets is an optional feature. Therefore, if this feature is not used, it is not necessary to enter a password in this field.

Specifying the Work Center's Shift

The Shift on the General tab can be any number between 0 and 99.

Clicking on the **Data Collection** tab displays the following settings.



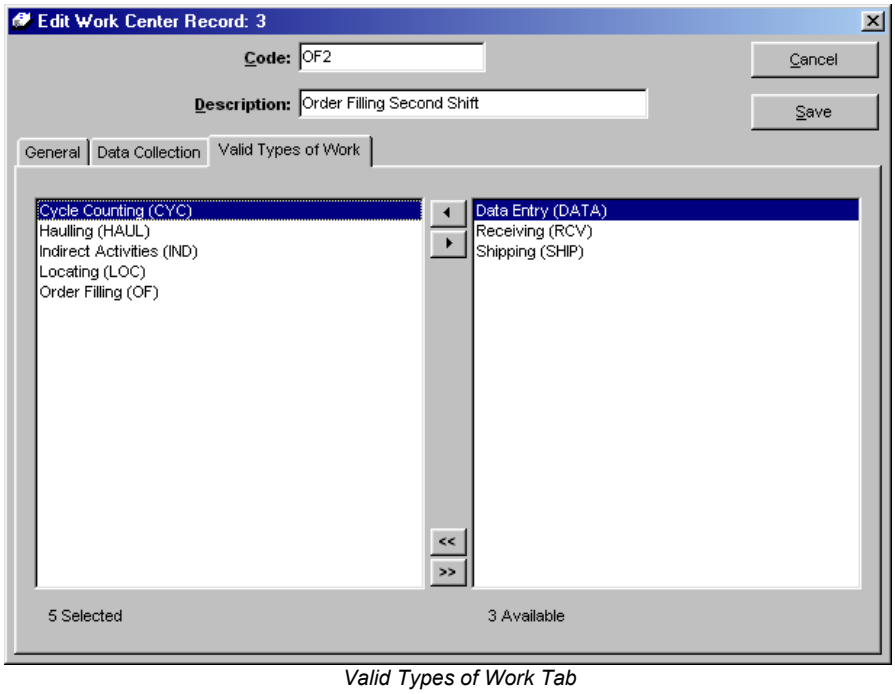
The Work Center Data Collection Tab

Setting the Work Center's Normal Work Hours

The work center's Normal Start Time and Normal Stop Time are entered on the Data Collection tab. The times are entered in 24 hour clock format. These settings are only used with ProRep's Data Collection Module. The primary use of these times is to determine if a transaction from another computer system, like a warehouse management system (WMS), is for today, tomorrow or yesterday.

For example, a work center has a normal start time of 18:00 hours (6pm) and a normal stop time of 02:00 hours (2am). ProRep calculates that the day dividing point is 10:00 hours (10am). This time is midway between the stop time and start time. ProRep interprets transactions that occur between 02:00 hours and 10:00 hours as working late. ProRep interprets transactions that occur between 10:00 hours and 18:00 hours as working early.

Clicking on the **Data Collection** tab displays the following settings



Valid Types of Work Tab

Specifying Which Types of Work are Performed in a Work Center

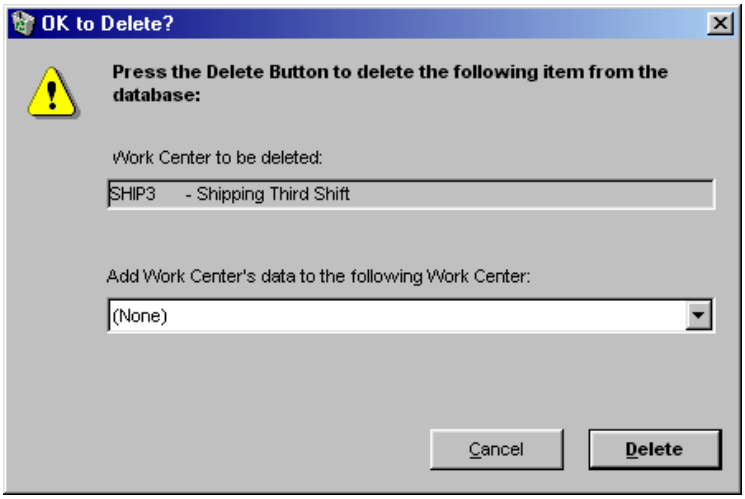
By default, when a new Work Center is added to the table, data for every type of work can be entered into the daily production sheets. To prevent the accidental entry of data for activities that belong to a specific type of work, remove it from the selected list on the Valid Types of Work tab.

Deleting a Work Center

If a work center no longer exists, you have several choices:

- Keep the work center and its data in the database. If this work center was established as a new shift for peak season and it will be re-established next peak season, do not delete it.
- Delete the work center and move its data into another work center. Note that once the data is summed into another work center, it can never be separated.
- Delete the work center and its data from the database. **Caution:** Choose this option with great care. Once the data is deleted it cannot be restored.

To delete a work center, click on the work center and click the **Delete** button. The delete work center dialog is displayed.


OK to Delete?
Press the Delete Button to delete the following item from the database:
Work Center to be deleted:
SHIP3 - Shipping Third Shift
Add Work Center's data to the following Work Center:
(None)
Cancel
Delete

Delete Work Centers

Except in rare occasions, you will want to select another work center that the data should be summed into when the work center is deleted. Select this work center from the pull down list. To actually delete the work center, click the **Delete** button.

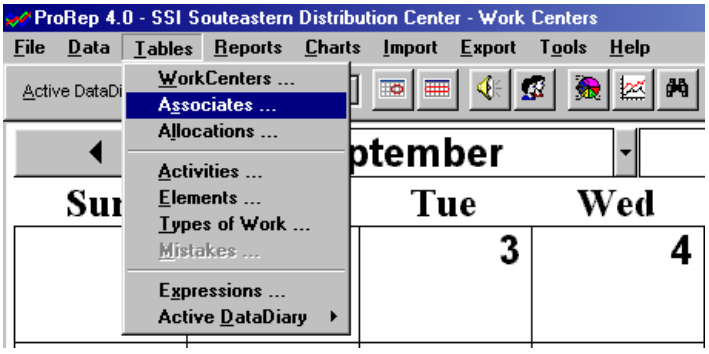
Associates

An associate is any person for whom units and/or hours information is to be input into ProRep. An account is automatically maintained in the associate DataDiary for each associate.

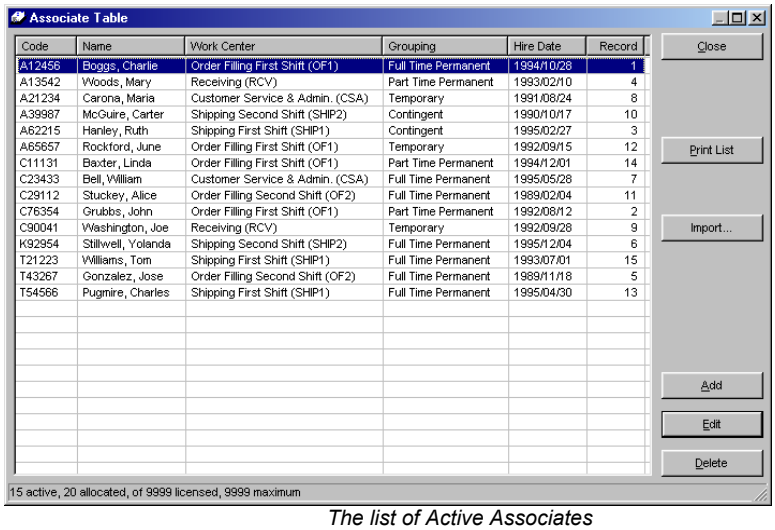
The number of associates in a ProRep system is limited to the number of associates for which a license has been purchased. A larger license for more associates can be purchased from Spalding Software.

Adding or Editing Associates

To set up a new or edit an existing associate, select **Tables > Associates**.

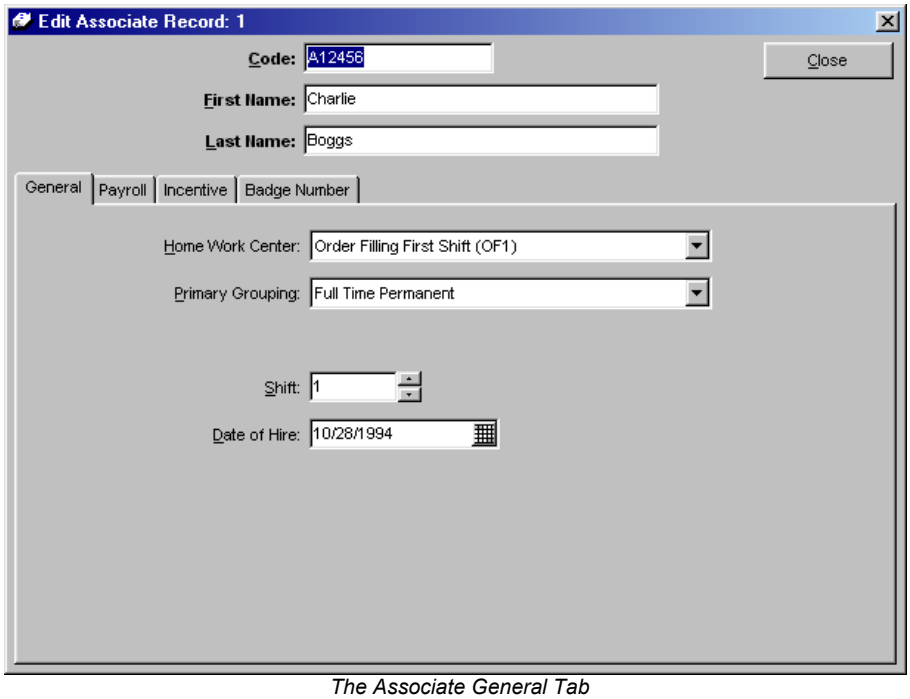


A list of previously defined associates is displayed.


Associate Table
Code
Name
Work Center
Grouping
Hire Date
Record
A12456 Boggs, Charlie Order Filling First Shift (OF1) Full Time Permanent 1994/10/28 1
A13542 Woods, Mary Receiving (RCV) Part Time Permanent 1993/02/10 4
A21234 Carona, Maria Customer Service & Admin. (CSA) Temporary 1991/08/24 8
A39987 McGuire, Carter Shipping Second Shift (SHIP2) Contingent 1990/10/17 10
A62215 Hanley, Ruth Shipping First Shift (SHIP1) Contingent 1995/02/27 3
A65657 Rockford, June Order Filling First Shift (OF1) Temporary 1992/09/15 12
C11131 Baxter, Linda Order Filling First Shift (OF1) Part Time Permanent 1994/12/01 14
C23433 Bell, William Customer Service & Admin. (CSA) Full Time Permanent 1995/05/28 7
C29112 Stuckey, Alice Order Filling Second Shift (OF2) Full Time Permanent 1989/02/04 11
C76354 Grubbs, John Order Filling First Shift (OF1) Part Time Permanent 1992/08/12 2
C90041 Washington, Joe Receiving (RCV) Temporary 1992/09/28 9
K92954 Stillwell, Yolanda Shipping Second Shift (SHIP2) Full Time Permanent 1995/12/04 6
T21223 Williams, Tom Shipping First Shift (SHIP1) Full Time Permanent 1993/07/01 15
T43267 Gonzalez, Jose Order Filling Second Shift (OF2) Full Time Permanent 1989/11/18 5
T54566 Pugmire, Charles Shipping First Shift (SHIP1) Full Time Permanent 1995/04/30 13
Close
Print List
Import...
Add
Edit
Delete
15 active, 20 allocated, of 9999 licensed, 9999 maximum

The list of Active Associates

To add an associate, click the **Add** button**.** To edit an associate, highlight the associate and click the **Edit** button.



The Associate General Tab

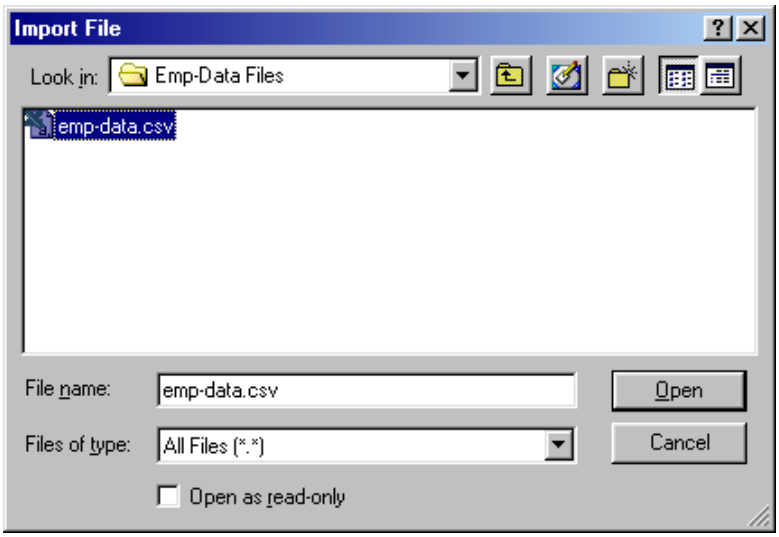
Adding or Updating Associate Information by Importing

Optionally, associates can be added to the table or their existing information updated by importing the information from a file. If the associate code already exists their information will be updated. If the code does not exist it adds the associate to the table.

Spalding Software's DataImport application can be used to create an importable file from a flat file or report printed to file. DataImport is included on the ProRep installation CD.

The delimited file can be created using Excel, Access or any another application that can create a delimited file. The delimited file must be of the proper format, for details on this format see the section below: *Associate Import File Format*.

Click the **Import** button. This displays a file selection window.



Select the file to be imported and click the **Open** button.

Specifying the Associate's Identification Code

Enter a code that uniquely identifies this associate. The code can be any combination of up to 10 letters and numbers. The associate code is used when entering data on production sheets.

Usually, the associate's number used for payroll system can be used. If the daily production data is imported from another computer system such as a warehouse management system WMS, that system's user ID should be used as ProRep's associate code.

Entering the Associate's Name

The associate's name is entered as separate fields for the first and last names. To enter a middle name or initial, include it in the First Name field. To enter a suffix such as Jr., include it in the Last Name field. Most reports that list associates are printed in last name order.

Specifying an Associate's Home Work Center

A home work center must be selected from the pull down list on the General Tab. This should be the work center to which they are assigned or most often perform their work.

ProRep automatically maintains an associate account grouping for each work center. When an associate is assigned to a work center, the associate account is added to their home work center's account grouping. If an associate's work center is changed, they are deleted from the old work center grouping and added to the new one.

Specifying an Associate's Primary Grouping

In addition to an associate being automatically included on their home work center's grouping, an associate can be automatically maintained on one additional user-defined associate account grouping. Typical user-defined groupings include employment status such as full time, part time, seasonal and temporary. An entry in this field is optional.

Associates can also be manually included on any number of additional user-defined account groupings. For more information see the next section in this chapter titled; *Account Groupings*.

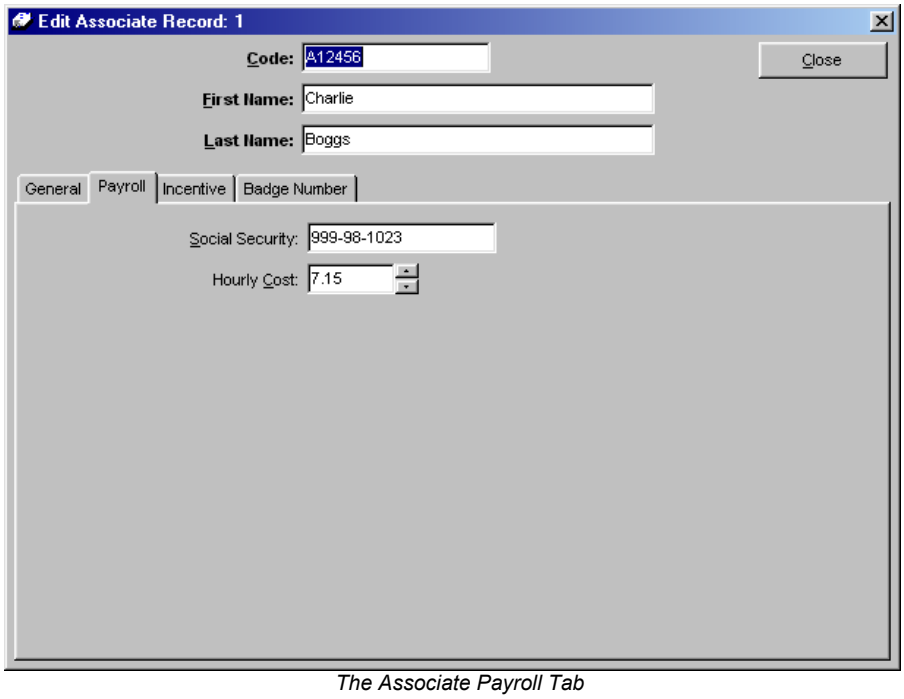
Specifying an Associate's Shift

The shift is an arbitrary number between 0 and 99. The shift number's primary use in ProRep is to help determine the work center when importing daily production data from a WMS or other data source.

Entering the Associate's Date of Hire

When a new associate is added, the date of hire defaults to today's date. To change the date on the General Tab, click on the calendar control on the right side of the Date of Hire field and select the date.

Clicking on the **Payroll** tab displays the following settings.



The Associate Payroll Tab

Entering the Associate's Social Security Number

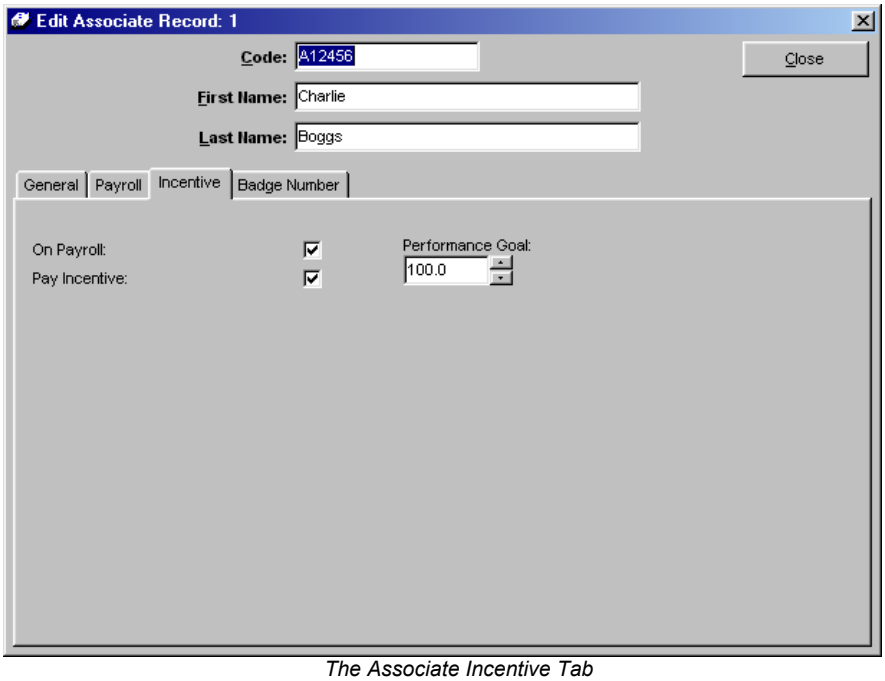
The Social Security number is an optional field. The Social Security number can be entered with or without hyphens.

Entering the Associate's Pay Rate

The Hourly Cost field on the Payroll Tab can contain the associate's rate of pay or another number such as their fully loaded cost per hour including fringe benefits. This field is optional except as explained below.

If the incentive module is being used and it uses personal wage rates to calculate the incentive, the hourly cost is used in determining the associate's incentive pay.

Clicking on the **Incentive** tab displays the following settings.



The Associate Incentive Tab

The settings on the Incentive tab are only used in the incentive module.

Not Including the Associate on the Incentive Payroll Report

By default all associates are included on the incentive payroll reports. If there is an associate such as a working supervisor whose pay is considered confidential they can be excluded from the report by un-checking the On Payroll check box. This setting is only used in the incentive module.

Making an Associate Ineligible for Incentive Pay

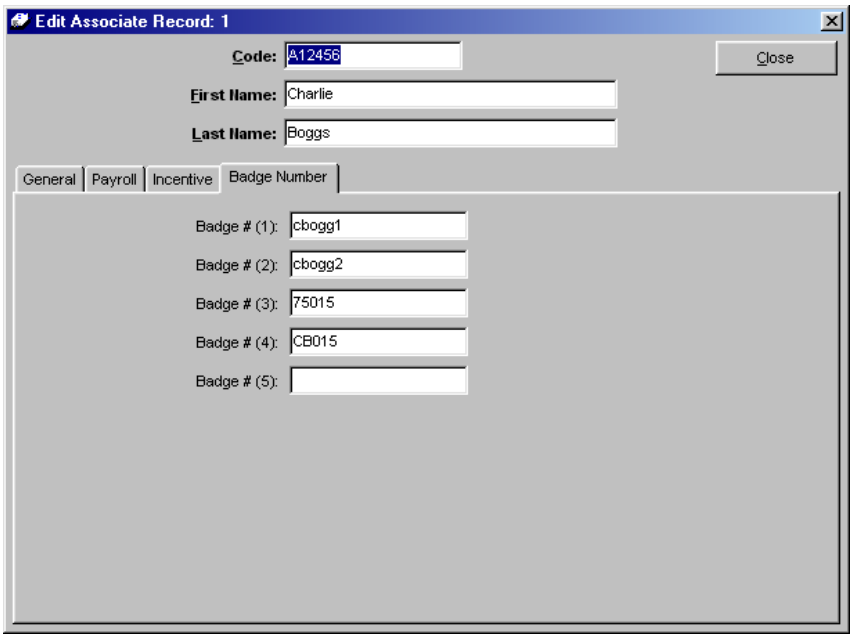
By default all associates are eligible for incentive pay. Depending on an organization's policies, an associate such as a working or salaried supervisor may not be eligible for incentive. If this associate performs only non-measured activities,

they are not working on activities that could result in an incentive pay. However, if this associate performs activities that are measured, the default is to calculate incentive pay. To prevent the associate from getting an incentive, un-check the Pay Incentive check box. This setting is only used in the incentive module.

Specifying the Associate's Incentive Performance Goal

The percent performance that must be met before an associate earns an incentive can either be a system wide goal or a unique personal goal for each associate. The setting is specified in the incentive module parameters as described in *Appendix A: Using the Incentive Features*. If personal performance goals are being used, enter the percent in the Performance Goal box.

Clicking on the **Badge Number** tab displays the following settings.



Specifying Associate ID's Used in Other Systems

If ProRep is importing data from a warehouse management system (WMS), pick to light system or time and attendance system that uses different associate ID numbers than ProRep, the ID numbers are entered as badge numbers. ProRep allows 5 additional ID numbers to be entered on the badge number tab.

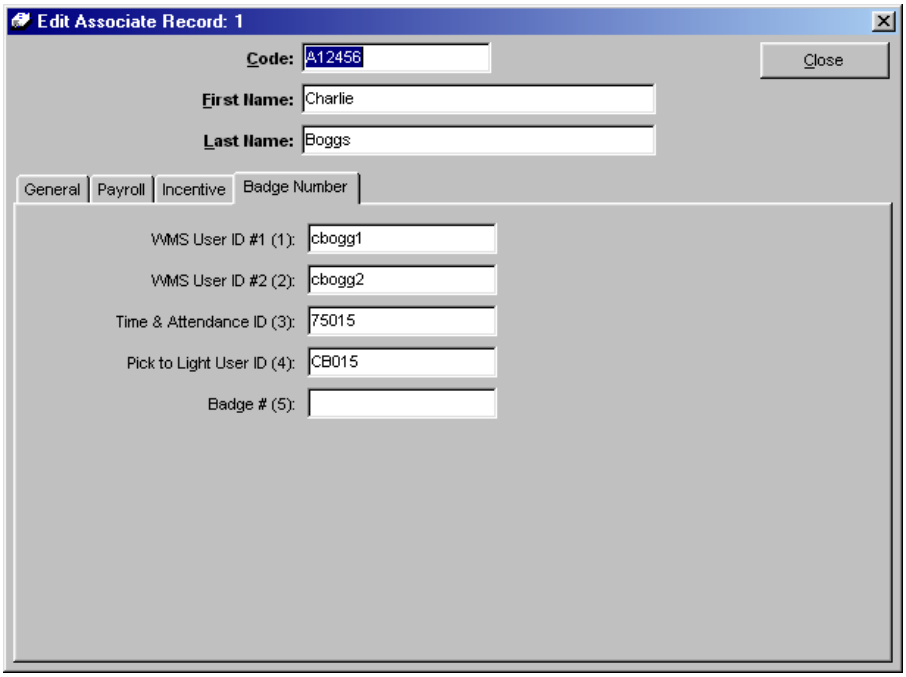
Use of badge numbers must be consistent. In the example above, the Time and Attendance System ID is badge number 3. Therefore, **all associates** must have their Time and Attendance System ID entered as badge number 3. If associates have a second or third WMS ID, use 2 or three badge number fields.

To help maintain consistent use of badge numbers, the badge descriptions can be specified in the ProRep program information file called ddprini.--? The ? represents the ProRep system number of 1 through 9. This file can be edited with Notepad.

The following information is entered into the ProRep program information file.

[Badges]
1=WMS User ID#1
2=WMS User ID#2
3=Time and Attendance ID
4=Pick to Light User ID

This will change the descriptions on the Badge Number tab as shown below.

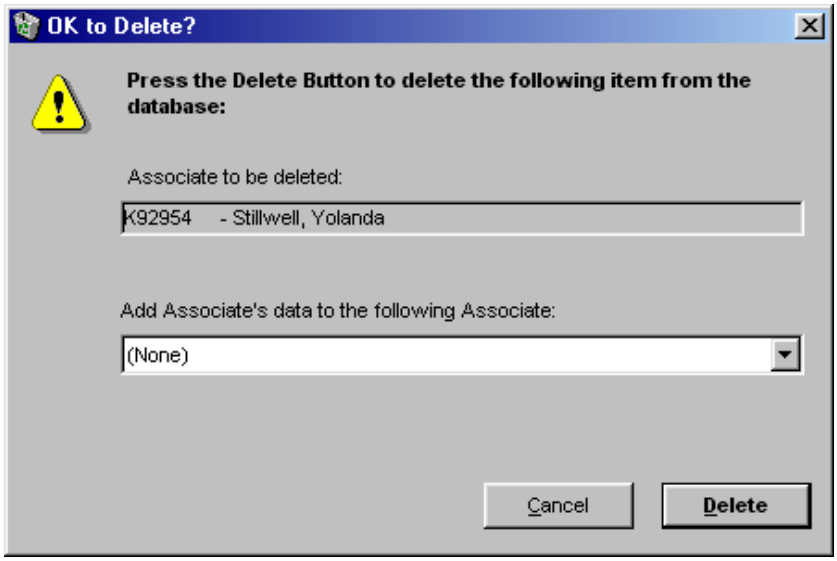


Deleting an Associate

If an associate no longer works for the organization, you have several alternatives:

- Keep the associate and their data in the database. Remember that there is room for a specific number of associates based on the size of the license. Associates may need to be deleted to make room for new associates.
- Delete the associate and move their data into a generic associate such as "Former Associates". Note that once the data is summed into another associate, it can never be separated.
- Delete the associate and their data from the database. Deleting an associate's data does not remove any data from the work center or allocation DataDiaries. This is the most common choice.

To delete an associate, from the list of active associates, click on the associate and click the **Delete** button. The delete associate dialog is displayed.


OK to Delete?
Press the Delete Button to delete the following item from the database:
Associate to be deleted:
K92954 - Stillwell, Yolanda
Add Associate's data to the following Associate:
(None)
Cancel
Delete

Delete Associate Dialog Box

Usually, you will want to select a generic associate that the data should be summed into when the associate is deleted. Select this associate from the pull down list. To actually delete the associate, click the **Delete** button.

Associate Import File Format

A Comma Separated Variable (CSV) file with commas (,) separating each field is required. Optionally, it can contain quotes (") around text fields. Sometimes this type of file is called a delimited text file or a comma delimited file. The file does not need a specific name.

Excel and Access can create this type of file. Also, Spalding Software's DataImport program (included with ProRep) can be used to convert many different file types and mainframe reports into a CSV file. The DataImport software can be installed from the ProRep CD.

All fields do not have to be present in the records. At a minimum, the imported CSV file must have the associate (code) number. From a practical stand point, the records should include the Last Name and First Name fields.

When the CSV file is imported, if the Associate Code is not found, a new associate record is added to the table.

If the Associate Code is found, the existing associate record is updated with the information from the CSV file. If a field in the CSV file is blank (contains no data) and there is data in the existing associate's record, the information in the associate record is not changed. For example, if the CSV file only contains data in the Associate Code and Hourly Cost (pay rate) fields, the associates' Hourly Cost is updated in ProRep without changing or deleting their names.

Associate Delimited Import File Layout			
Field	**Excel Column**	**Character/Number**	**Type**
1	A	C	Associate Code (number)
2	B	C	Last Name
3	C	C	First Name
4	D	C	Home Work Center Code
5	E	C	Social Security Number, with or without dashes (-)
6	F	C	Badge Number 1
7	G	C	Badge Number 2
8	H	C	Badge Number 3
9	I	C	Badge Number 4
10	J	C	Badge Number 5
11	K	N	Shift (0 - 99)
12	L	C	Date of Hire in YYYY/MM/DD format
13	M	N	Hourly Cost (pay rate)
14	N	N	Performance Goal, used only with incentive module
15	O	C	Primary Group

Example 1. All fields are in these records:

```
A12456,Burdell,George,OF1,900-98-1023,,,,,,1,1994/10/28,7.15,100.00,Full Time Permanent
Z76354,Grubbs,Jeff,OF1,700-11-0007,,,,,,1,1992/08/12,6.87,100.00,Temporary
```

Example 2. Only the number and name fields are in these records:

```
"A12456","Burdell","George"
"Z76354","Grubbs","Jeff"
```

Example 3. Only the number, name and pay rate are populated in these records:

```
A12456,Burdell,George,,,,,,,,7.15
Z76354,Grubbs,Jeff,,,,,,,,,6.87
```

Allocations

When daily production data is entered onto a production sheet or imported from another system, it can be allocated to a customer, product line or department. Following are some typical examples of allocations used in different industries:

- In a retailer's distribution center, the allocations are the merchandise departments.
- In a third party logistics center, the allocations are the companies for whom they perform distribution services.
- In a manufacturer's warehouse, the allocations are the different divisions of the company for whom they warehouse products.
- In a manufacturer's production facility, the allocations are the different products that they make.
- In a financial services company's operations center, the allocations are the companies for whom they process credit card payments.

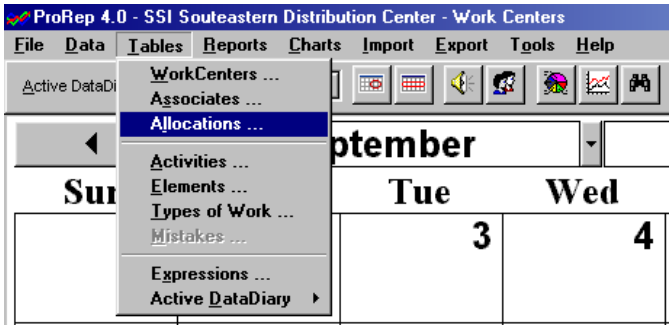
The use of allocations is optional. It is not necessary to set up any allocations. Not all organizations want to or need to track units, hours or cost by user of their services. Even for those organizations that would like to use the allocation feature, it is not always practical. For example, in a retailer's distribution center, if an associate is filling an order with several different types of merchandise, it might not be practical to record the time by merchandise department.

Even if the allocation feature is used, there will be some activities that can not be allocated. When an activity is set up, there is a setting that specifies whether it is allocated.

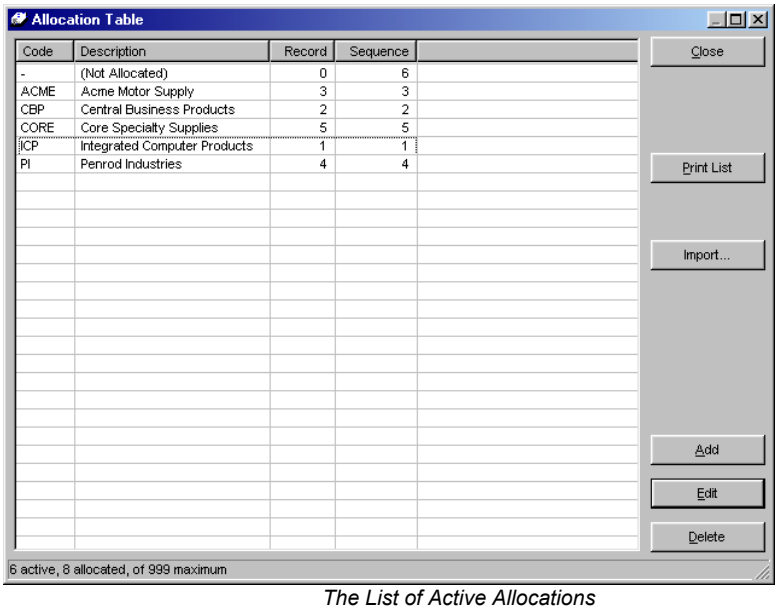
An account is automatically maintained in the allocation DataDiary for each allocation. One additional account is also maintained for all units, time, and cost that is not allocated. There can be a maximum of 999 allocation.

Adding or Editing an Allocation

To set up a new or edit an existing allocation, select **Tables > Allocations.**

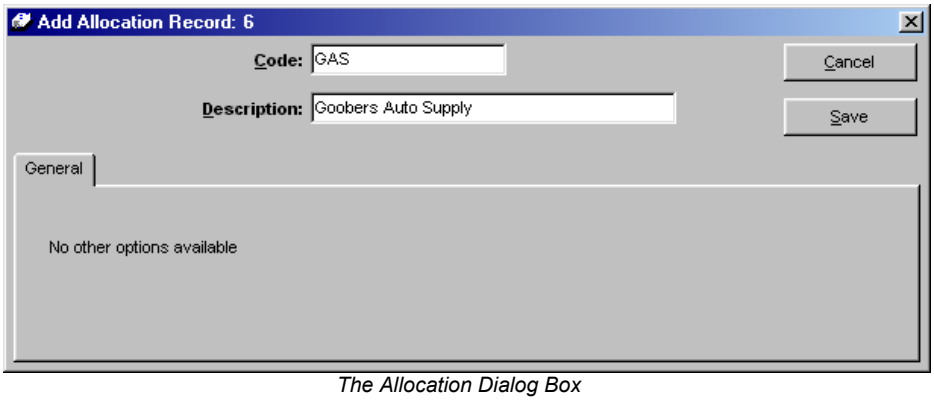


A list of previously defined allocations is displayed.



The List of Active Allocations

To add a new allocation click the **Add** button. To edit an allocation, highlight the allocation and click the **Edit** button.



The Allocation Dialog Box

Specifying an Allocation's Identification Code

Enter a code that uniquely identifies this allocation. The code can be any combination of up to 10 letters and numbers. The allocation's code is primarily used when entering data on production sheets. Therefore, it should be short but easily recognizable.

Specifying an Allocation's Description

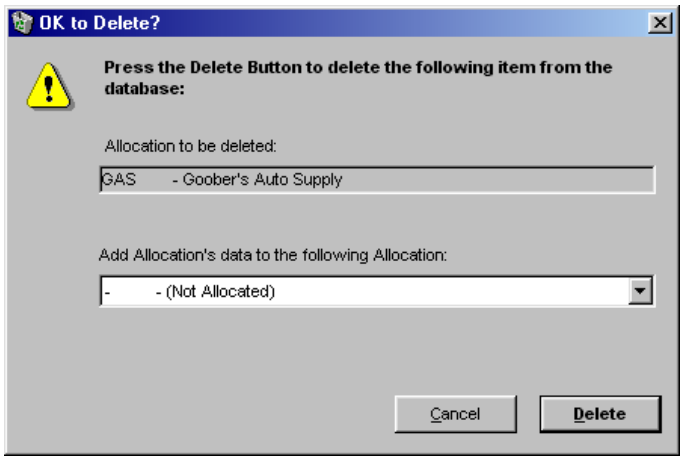
Enter a description of up to 30 characters

Deleting an Allocation

If an allocation no longer exists, you have two choices:

- Keep the allocation and its data in the database.
- Delete the allocation and move its data into another allocation or to the " Not Allocated" allocation. Note that once the data is summed into another allocation, it can never be separated.

To delete an allocation, click on the allocation and click the **Delete** button. The delete allocation dialog is displayed.


OK to Delete?
Press the Delete Button to delete the following item from the database:
Allocation to be deleted:
GAS - Goober's Auto Supply
Add Allocation's data to the following Allocation:
- (Not Allocated)
Cancel
Delete

If the allocation's data is not to be summed into another allocation, select Not Allocated from the pull down list. If the data is to be moved into another allocation, select the allocation from the pull down list. To actually delete the allocation, click the **Delete** button.

Work Center Account Groups

A work center group is a list of two or more accounts in the work center DataDiary. Reports and graphs can be produced that show totals of all work centers in the group. Also, all of the work centers in the group can be listed individually on reports by selecting the group rather than by manually selecting each work center one at a time.

A work center can be included in any number of groups. There are a maximum of 999 work center groups. In the example below, the work center named Order Filling First Shift is on both the First Shift group and the Total Order Filling group.

Group Description: ***First Shift***
Accounts in Group: *Customer Service & Administration*
Order Filling First Shift ⇐
Receiving
Shipping First Shift

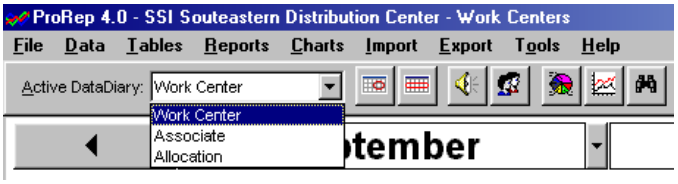
Group Description: ***Total Order Filling***
Accounts in Group: *Order Filling First Shift* ⇐
Order Filling Second Shift

How Work Center Group Totals are Calculated

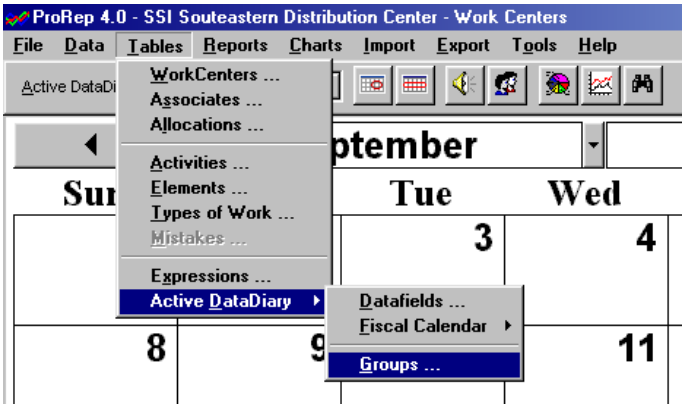
No data in ProRep is kept by work center group. The data is kept separately in each work center account. When a group total is printed on a report or plotted on a chart, it is calculated by summing the data for all of the work center accounts that are in the group at that time. Therefore, if the list of work centers in a group is changed, the next time a report or graph is produced the group totals are calculated by summing the data for the new list of work centers.

Adding or Editing a Work Center Group

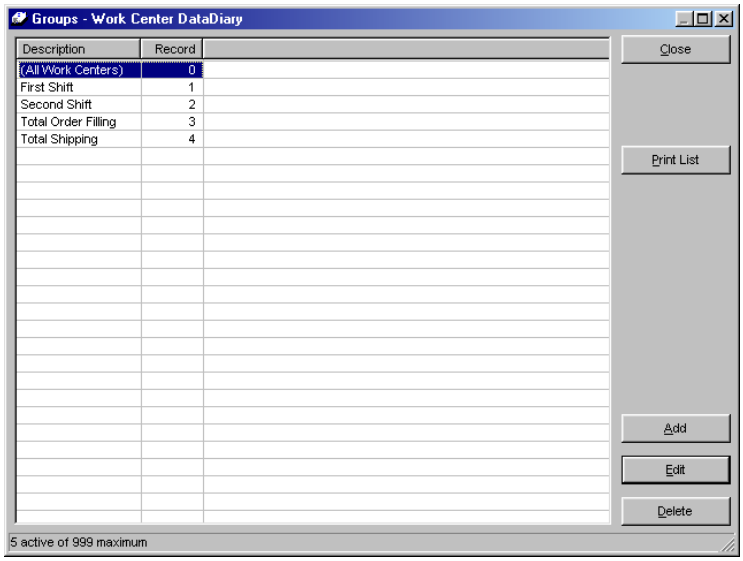
To set up a new or edit an existing work center account group, make sure that the Active DataDiary is set to Work Center.


ProRep 4.0 - SSI Souteastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Work Center
Associate
Allocation

Then from the menu bar, select **Tables > Active DataDiary > Groups**.



A list of previously defined groups is displayed.



The List of Active Work Center Groups

In the list of work center groups, is a group named All Accounts that is automatically maintained by ProRep. It includes all of the work centers.

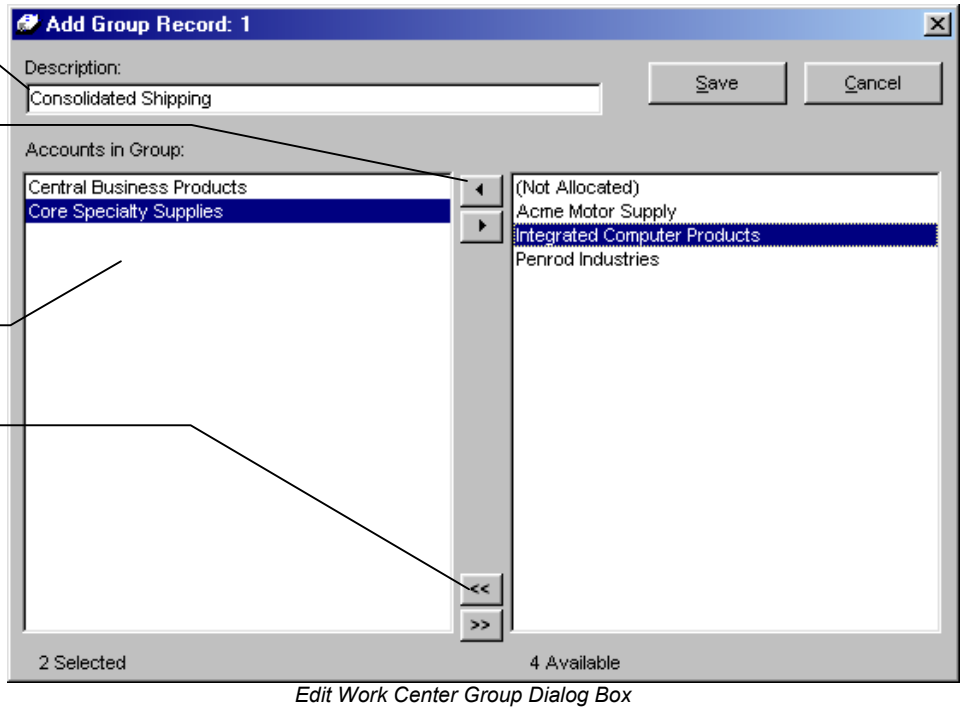
To add a new work center group, click the **Add** button. To edit an existing work center group, click on the group in the list and click the **Edit** button.

The work center group's description.

These buttons move the highlighted account to the opposite box.

The list of accounts in this group.

These buttons move all accounts to the opposite box.



Edit Work Center Group Dialog Box

The first step in adding a group is to enter a description of up to 30 characters.

Adding or Removing Work Centers from a Group

The edit work center group dialog box has two boxes. The box on the left is a list of work centers currently selected to be in the group. The box on the right left is a list of work centers that are not in the group but can be added to the group. Highlighting a work center and clicking the arrow buttons will move a work center to the indicated box. Work centers can also be dragged from one box to another.

Deleting a Work Center Group

To delete a work center group, from the list of groups click on the group and click the **Delete** button. Deleting a group does not remove any data from the databases.

Associate Account Groups

An associate group is a list of two or more accounts in the associate DataDiary. Reports and graphs can be produced that show totals of all associates in the group. Also, all of the associates in the group can be listed individually on reports by selecting the group rather than by manually selecting each associate one at a time.

ProRep automatically maintains an associate account grouping for each work center. When an associate is assigned to a work center, the associate account is automatically added to their home work center's account grouping. If an associate's work center is changed, they are deleted from the old work center grouping and added to the new one.

Associate groups can be created for several different purposes. Same possible examples of associate groups are:

- Employment status such as full time, part time, seasonal and temporary.
- Length of service such as new hire, less than 1 year, 1 to 5 years, and 5 plus years.
- Job title such as picker, packer, material handler, fork truck operator and data entry clerical.

An associate can be included in any number of groups. There are a maximum of 999 associate groups. In the example below, Linda Baxter is in both the Full Time Associates group and the Data Entry Operators group.

Group Description: ***Full Time Associates***
Accounts in Group: *Ruth Hanley*
Yolanda Stillwell
Charles Pugmire
Linda Baxter ⇐
Tom Williams

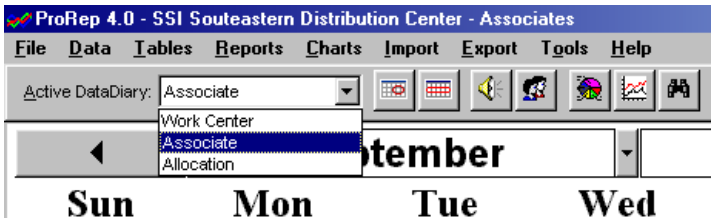
Group Description: ***Data Entry Operators***
Accounts in Group: *Maria Corona*
Linda Baxter ⇐
John Grubbs
June Rockford

How Associate Group Totals are Calculated

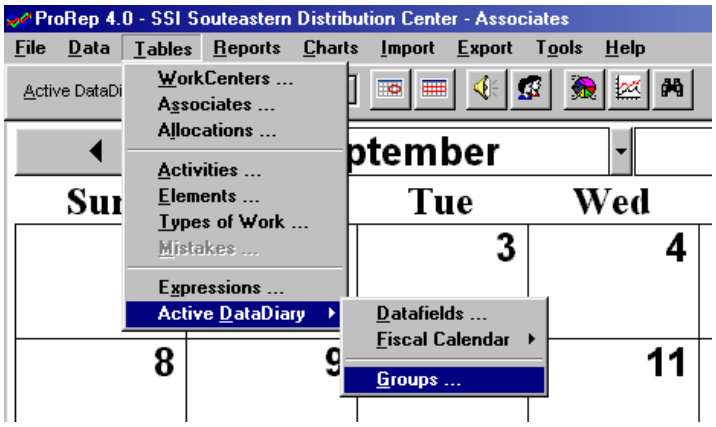
No data in ProRep is kept by associate group. The data is kept separately in each associate account. When a group total is printed on a report or plotted on a chart, it is calculated by summing the data for all of the associate accounts that are in the group at that time. Therefore, if the list of associates in a group is changed, the next time a report or graph is produced the group totals are calculated by summing the data for the new list of associates.

Adding or Editing an Associate Group

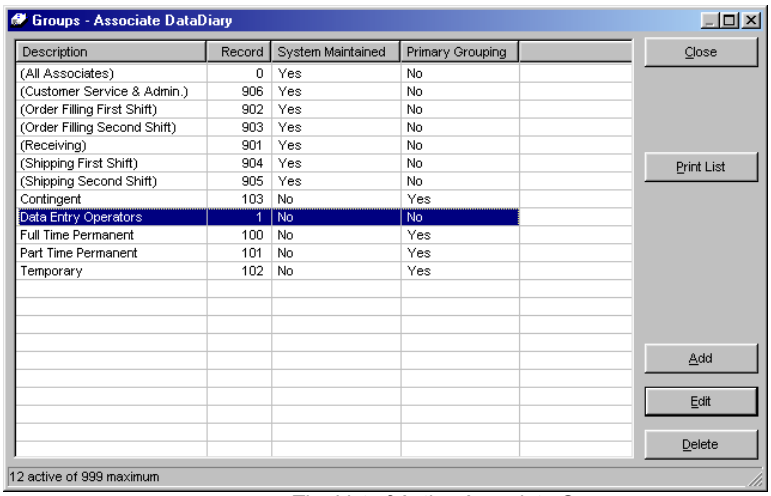
To set up a new or edit an existing associate account group, make sure that the Active DataDiary is set to Associate.


ProRep 4.0 - SSI Souteastern Distribution Center - Associates
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Associate
Work Center
Associate
Allocation
Sun Mon Tue Wed

Then from the menu bar, select **Tables > Active DataDiary > Groups**.



A list of previously defined groups is displayed.



The List of Active Associate Groups

In the list of associate groups, is a group named All Accounts that is automatically maintained by ProRep. It includes all of the associates.

To add a new associate group, click the **Add** button. To edit an existing associate group, click on the group in the list and click the **Edit** button.

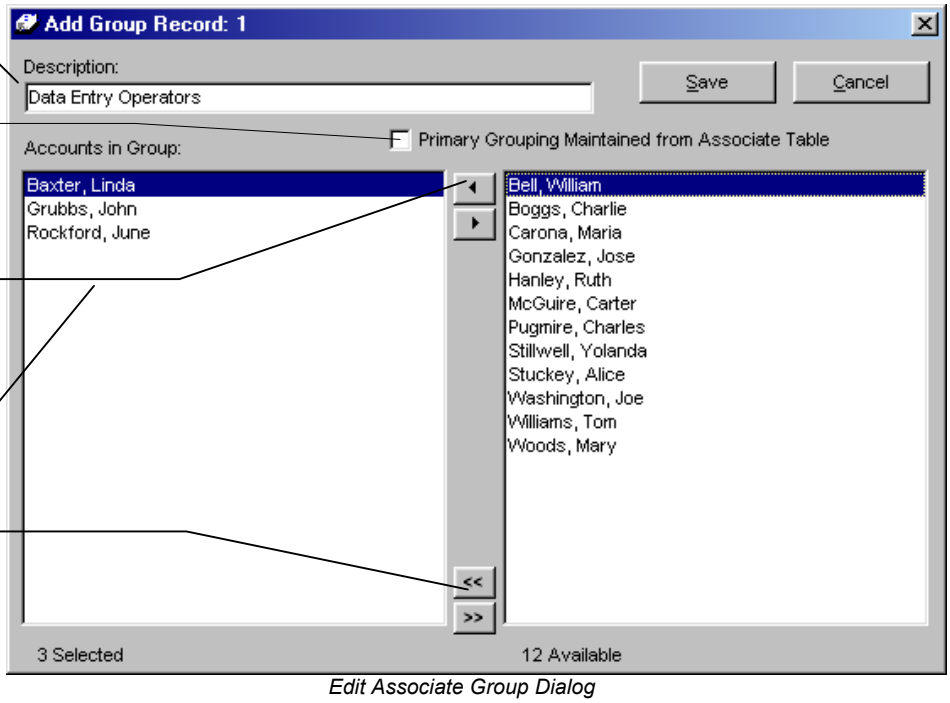
The associates group's description.

Checking this box, sets the group as a primary grouping.

These buttons move the highlighted account to the opposite box.

The list of associates in this group.

These buttons move all accounts to the opposite box.



Edit Associate Group Dialog

The first step in adding a group is to enter a description of up to 30 characters.

Adding or Removing Associates from a Group

The edit associate group dialog has two boxes. The box on the left is a list of associates currently selected to be in the group. The box on the right left is a list of associates that are not in the group but can be added to the group. Highlighting an

associate and clicking the arrow buttons will move an associate to the indicated box. Associates can also be dragged from one box to another.

Making a Group a Primary Group

It is often more convenient to assign an associate to a group when the associate is added to the associate table. When adding or editing an associate's record, a field named primary grouping is displayed. Groups that are marked as a primary grouping are displayed in the primary grouping field's pull down list. An associate can be assigned to one primary grouping.

To set the group as a primary group, check the box labeled **Primary Grouping Maintained from Associate Table**.

Deleting an Associate Group

To delete an associate group, from the list of groups click on the group and click the **Delete** button. Deleting a group does not remove any data from the databases.

Allocation Account Groups

An allocation group is a list of two or more accounts in the allocation DataDiary. Reports and graphs can be produced that show totals of all allocations in the group. Also, all of the allocations in the group can be listed individually on reports by selecting the group rather than by manually selecting each allocation one at a time.

Account groups can be created for several different purposes. Same possible examples of account groups are:

- In a retailer's distribution center, the merchandise divisions that the retail departments belong to such as shoes, furniture, sporting goods, and appliances.
- In a third party logistics center, the type of customer such as cost plus, revenue per unit and fixed fee.

An account can be included in any number of groups. There are a maximum of 999 account groups. In our example system, the allocations are customers. The groups are defined based on how customers are billed.

Group Description: ***Cost Plus Customers***
Accounts in Group: *Central Business Products*
Core Specialty Supplies
Goober's Auto Supply

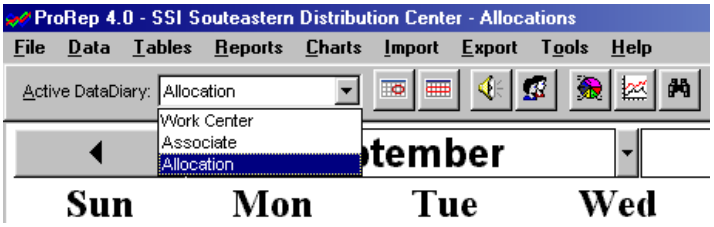
Group Description: ***Cost Per Unit Customers***
Accounts in Group: *Integrated Computer Products*
Acme Motor Supply
Penrod Industries

How Allocation Group Totals are Calculated

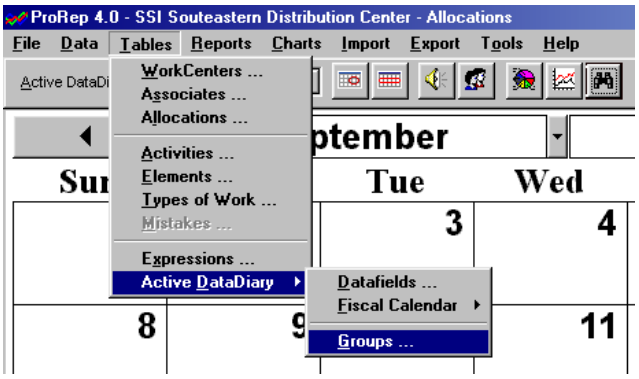
No data in ProRep is kept by allocation group. The data is kept separately in each allocation account. When a group total is printed on a report or plotted on a chart, it is calculated by summing the data for all of the allocation accounts that are in the group at that time. Therefore, if the list of allocations in a group is changed, the next time a report or graph is produced the group totals are calculated by summing the data for the new list of allocations.

Adding or Editing an Allocation Group

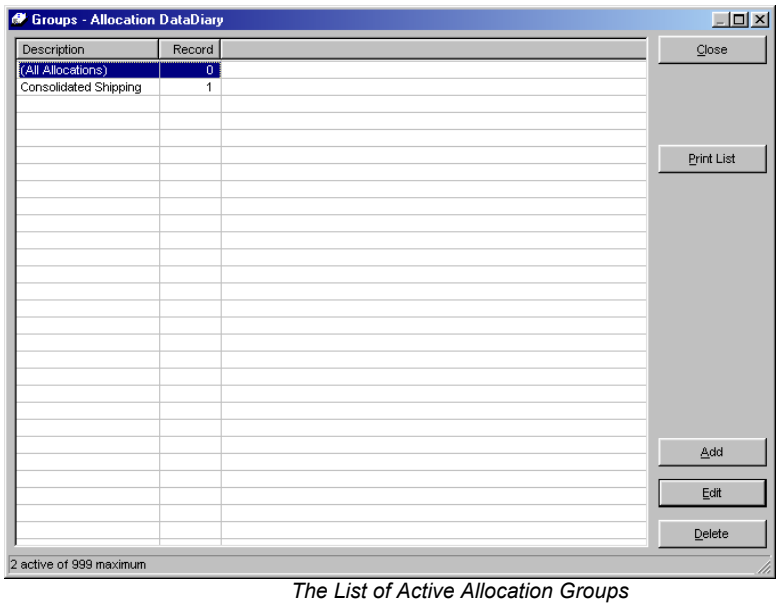
To set up a new or edit an existing allocation account group, make sure that the Active DataDiary is set to Allocation.


ProRep 4.0 - SSI Souteastern Distribution Center - Allocations
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Allocation
Work Center
Associate
Allocation
Sun Mon Tue Wed

Then from the menu bar, select **Tables > Active DataDiary > Groups**.



A list of previously defined groups is displayed.



The List of Active Allocation Groups

In the list of allocation groups, is a group named All Accounts that is automatically maintained by ProRep. It includes all of the allocations.

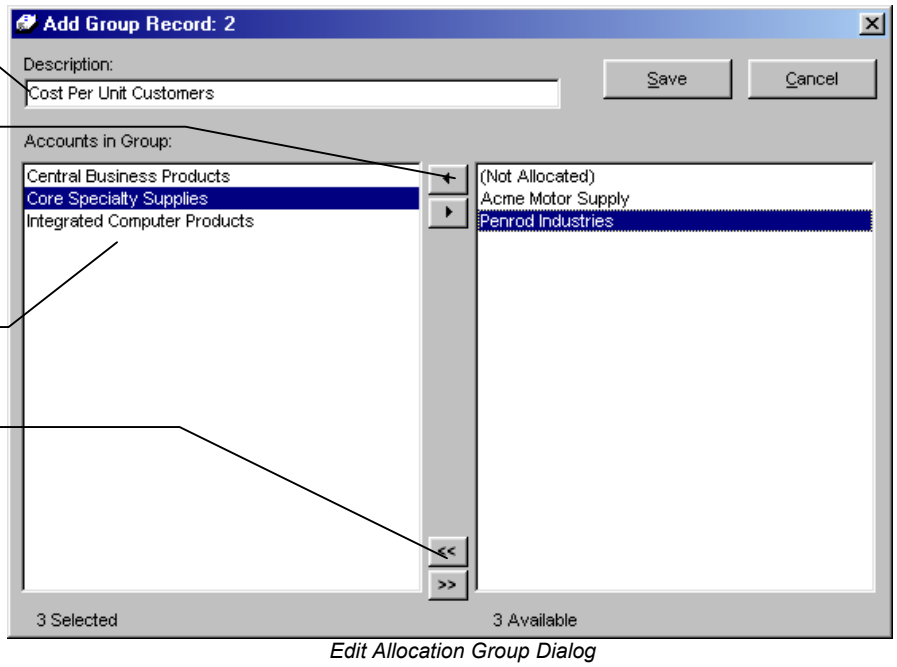
To add a new allocation group, click the **Add** button. To edit an existing allocation group, click on the group in the list and click the **Edit** button.

The allocation group's description.

These buttons move the highlighted account to the opposite box.

The list of accounts in this group.

These buttons move all accounts to the opposite box.



Edit Allocation Group Dialog

The first step in adding a group is to enter a description of up to 30 characters.

Adding or Removing Allocations from a Group

The edit allocation group dialog has two boxes. The box on the left is a list of allocations currently selected to be in the group. The box on the right left is a list of

allocations that are not in the group but can be added to the group. Highlighting an allocation and clicking the arrow buttons will move an allocation to the indicated box. Allocations can also be dragged from one box to another.

Deleting an Allocation Group

To delete an allocation group, from the list of groups click on the group and click the **Delete** button. Deleting a group does not remove any data from the databases.

Datafields

Datafields are the fields in the records of the work center, associate and allocation DataDiaries. Most of the datafields are automatically set up by ProRep when an activity such as picking, packing or data entry is added. The datafields are set up in each of ProRep's three DataDiaries to hold the results of performing these activities. This includes datafields for:

- Measured hours
- Unmeasured hours
- Earned hours
- Cost
- Datafields for each element (unit of measure) such as cartons, lines and pallets

If the quality measurement or incentive modules are used, datafields are also automatically set up by ProRep to track the results of these modules.

User-defined datafields can be set up to hold data that is not entered into production sheets or otherwise produced within ProRep. Following are examples of typical information for which datafields can be established:

- Budgeted hours
- Planned units
- Actual payroll expense
- Hours from a time and attendance system
- Vacation hours

A user-defined datafield can be added to one of the DataDiaries or to all three DataDiaries. There can be a maximum of 9,999 datafields.

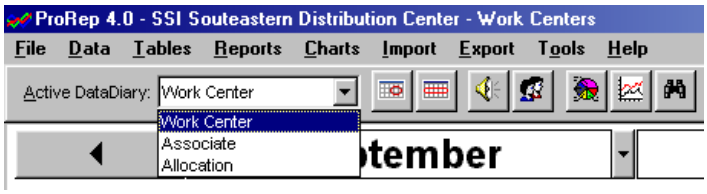
When a new DataDiary is created, the user specifies the number of datafields to include in each record. This can be any number up to 9,999. The larger the number, the more disk space that the DataDiary will consume. Therefore, a number smaller than 9,999 is usually specified (200 to 1,000 datafields is typical). Initially, these datafields are marked as not used. When a system maintained or user-defined datafield is added into a DataDiary, it is assigned to one of the unused datafields. When all of the fields in the DataDiary records are used or active, space for additional datafields must be allocated as discussed later in this section.

Data can be manually entered into user-defined datafields or imported from a file. For more information see ***Chapter 12: Using the DataDiaries***.

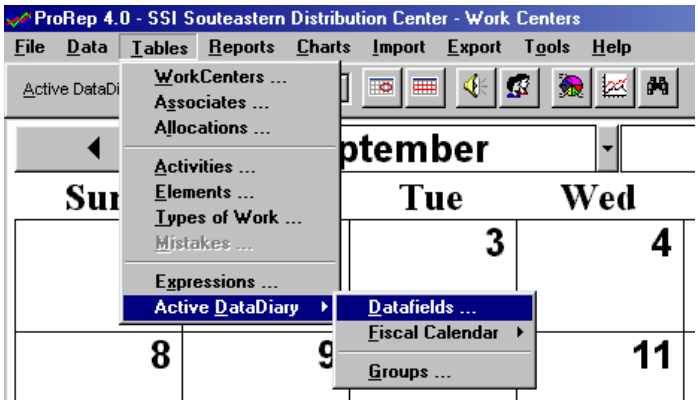
Both the automatically-defined and user-defined datafields can be included on user-defined reports and charts.

Adding or Editing a Datafield

To set up a new or edit an existing user-defined datafield, make sure that the correct Active DataDiary is selected.

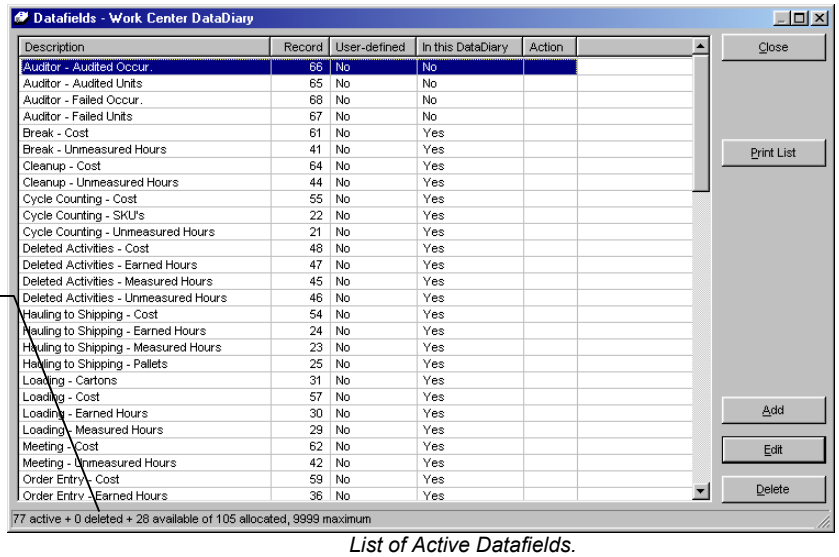

ProRep 4.0 - SSI Souteastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Work Center
Associate
Allocation

Then from the menu bar select **Tables > Active DataDiary > Datafields**.



The list of all datafields in both this DataDiary and the other DataDiaries is displayed.

The number of active, available, deleted, allocated, and maximum datafields is displayed.


Datafields - Work Center DataDiary
Description
Record
User-defined
In this DataDiary
Action
Auditor - Audited Occur. 66 No No
Auditor - Audited Units 65 No No
Auditor - Failed Occur. 68 No No
Auditor - Failed Units 67 No No
Break - Cost 61 No Yes
Break - Unmeasured Hours 41 No Yes
Cleanup - Cost 64 No Yes
Cleanup - Unmeasured Hours 44 No Yes
Cycle Counting - Cost 55 No Yes
Cycle Counting - SKU's 22 No Yes
Cycle Counting - Unmeasured Hours 21 No Yes
Deleted Activities - Cost 48 No Yes
Deleted Activities - Earned Hours 47 No Yes
Deleted Activities - Measured Hours 45 No Yes
Deleted Activities - Unmeasured Hours 46 No Yes
Hauling to Shipping - Cost 54 No Yes
Hauling to Shipping - Earned Hours 24 No Yes
Hauling to Shipping - Measured Hours 23 No Yes
Hauling to Shipping - Pallets 25 No Yes
Loading - Cartons 31 No Yes
Loading - Cost 57 No Yes
Loading - Earned Hours 30 No Yes
Loading - Measured Hours 29 No Yes
Meeting - Cost 62 No Yes
Meeting - Unmeasured Hours 42 No Yes
Order Entry - Cost 59 No Yes
Order Entry - Earned Hours 36 No Yes
77 active + 0 deleted + 28 available of 105 allocated, 9999 maximum
Close
Print List
Add
Edit
Delete

List of Active Datafields.

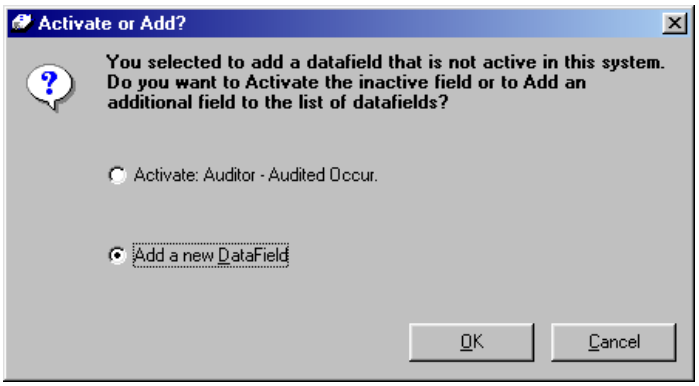
In addition to displaying the description of the datafields, this list includes columns that show the status of each datafield:

Action - If the datafield already exists and has not been chosen to be deleted this field will be blank. If the datafield is new or being deleted an appropriate message will be displayed in this column.

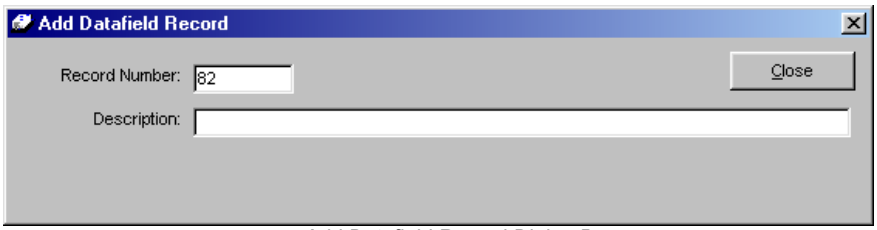
User-defined - If the datafield was set up manually by a user this column will display "Yes". If the datafield was automatically setup by ProRep then "No" will be displayed.

In this DataDiary - If the datafield is present in this DataDiary this column will display "Yes". If the datafield is not included in this DataDiary then "No" will be displayed.

To add a new datafield that is not on the list, click the **Add** button. To activate a datafield that is on the list and therefore active in another DataDiary, click on the datafield to highlight it, then click the **Add** button and select from the pop-up box that you want to activate the highlighted datafield.


Activate or Add?
You selected to add a datafield that is not active in this system. Do you want to Activate the inactive field or to Add an additional field to the list of datafields?
Activate: Auditor - Audited Occur.
Add a new DataField
OK
Cancel

To edit the description of an existing user-defined datafield, click on the datafield in the list and click the **Edit** button.



Add Datafield Record Dialog Box

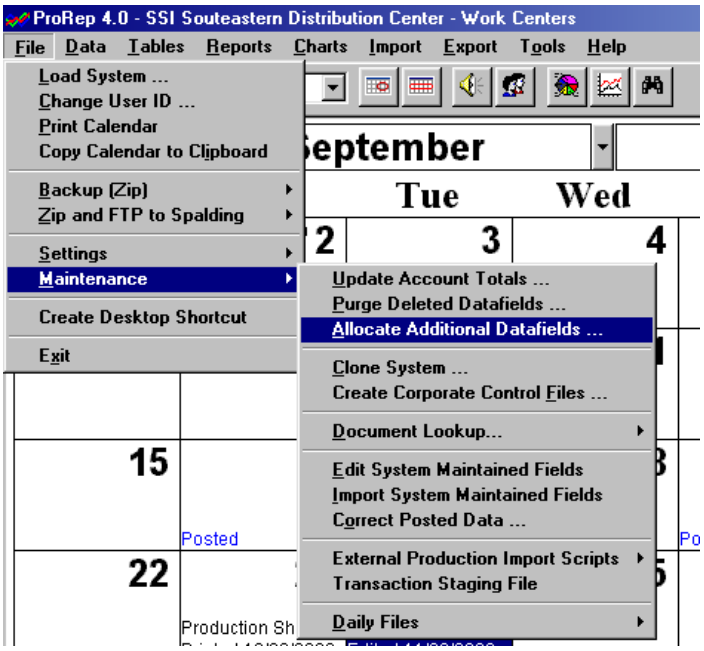
Enter a description or title of the datafield up to 30 characters. The description of the datafield must be unique.

After clicking the **Save** button on the dialog box, the datafield is displayed in the list with the words "To be added" in the Action column. The datafield is not actually added into the DataDiary until the **Save** button on the screen that lists the datafields is clicked. The datafield is added only into the active DataDiary.

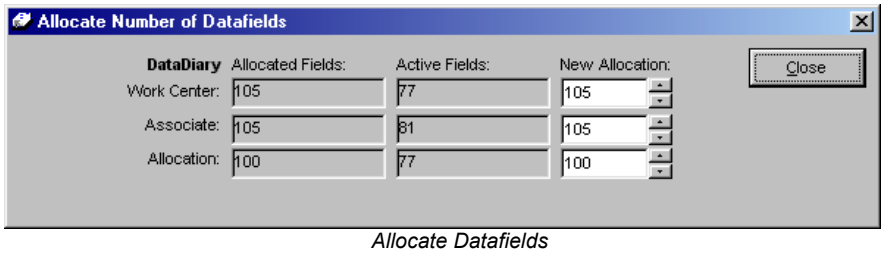
Allocating Space for More Datafields

When all of the fields in the DataDiary records are used or active, space for additional datafields must be allocated. To allocate space for more datafields, close

the list of datafields if it is open, then from the menu bar select **File > Maintenance > Allocate Additional Datafields**.



This displays the allocate datafields dialog box.



Allocate Datafields

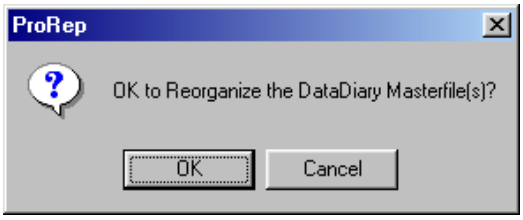
For each of the three DataDiaries the current number of allocated and active datafields is displayed. Enter the new datafield capacity for one or more of the DataDiaries in the corresponding New Allocation box. This can be any number up to 9,999.

The larger the number, the more disk space that the DataDiary will consume. Therefore, a number smaller than 9,999 is usually specified (200 to 1,000 datafields is typical). Selecting the right number of datafields for which to allocate space takes some experience and thought.

There are several competing objectives. The process of increasing the size of a DataDiary to accommodate additional datafields can be time consuming since the DataDiary must be reorganized. This process can take from 10 minutes to an hour or more depending on the size of the DataDiary. Therefore, specifying a large number of datafields reduces the need to repeat this process in the future. However, the larger the DataDiary the more disk space it consumes and the more time it takes to generate reports and charts.

In a typical ProRep system, most of the datafields are system maintained. They are automatically set up when an activity is added to hold the units and hours results. For a measured activity, an average of three to six datafields are required. For a non measured activity, usually one datafield is required.

After specifying the new number of datafields for which space should be allocated in each of the DataDiaries, click the **Save** button and confirm the selection. A progress box is displayed.



Before the DataDiaries are actual reorganized to include space for the additional datafields, they are automatically backed up. If space is to be increased in more than one DataDiary, the first DataDiary is backed up and reorganized before the second DataDiary is backed up and reorganized.

Remember that entire this process can take from 10 minutes to an hour or more depending on the size of each of the DataDiaries that need to be reorganized. When a DataDiary is being backed up, the process can be canceled by clicking the **Abort** button without causing harm to any of the DataDiaries. Any of the DataDiaries that have been reorganized up to this point will contain the increased number of Allocated Fields.

If the power goes out, the server goes down or any other event causes an abnormal termination while reorganizing a DataDiary, it is unusable. Therefore, it is automatically restored from the backup copy the next time the DataDiary is accessed.

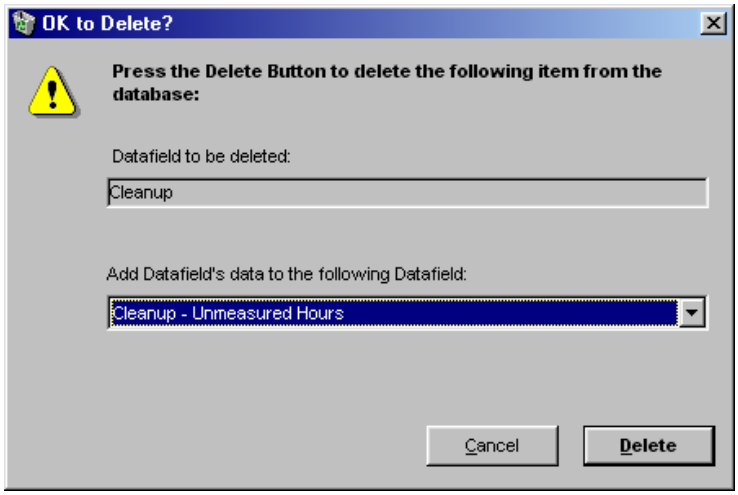
Deleting Datafields

If a datafield is no longer needed, you have several choices:

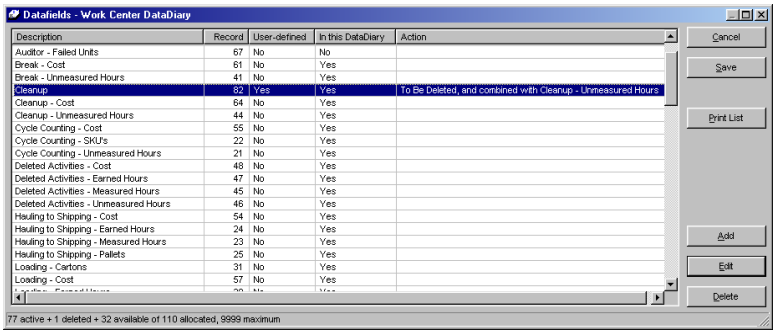
- Keep the datafield and its data in the database. If information stored in this datafield may be needed in the future, do not delete it.
- Delete the datafield and move its data into another datafield. Note that once the data is summed into another datafield, it can never be separated.
- Delete the datafield and its data from the database. Caution: Choose this option with great care. Once the data is deleted it cannot be restored.

Only user-defined datafields can be deleted. System maintained datafields cannot be deleted directly by a user. System maintained datafields are automatically deleted when the activity that they are associated with is deleted.

To delete a datafield, click on the datafield and click the **Delete** button. The delete datafield dialog is displayed.


OK to Delete?
Press the Delete Button to delete the following item from the database:
Datafield to be deleted:
Cleanup
Add Datafield's data to the following Datafield:
Cleanup - Unmeasured Hours
Cancel
Delete

If the datafield's data is not to be summed into another datafield, select None from the pull down list. If the data is to be moved into another datafield, select the datafield from the pull down list. After making the selection, click the **Delete** button.


Datafields - Work Center DataDiary
Description
Record
User-defined
In this DataDiary
Action
Auditor - Failed Units 67 No No
Break - Cost 61 No Yes
Break - Unmeasured Hours 41 No Yes
Cleanup 82 Yes Yes To Be Deleted, and combined with Cleanup - Unmeasured Hours
Cleanup - Cost 64 No Yes
Cleanup - Unmeasured Hours 44 No Yes
Cycle Counting - Cost 55 No Yes
Cycle Counting - SKU's 22 No Yes
Cycle Counting - Unmeasured Hours 21 No Yes
Deleted Activities - Cost 48 No Yes
Deleted Activities - Earned Hours 47 No Yes
Deleted Activities - Measured Hours 45 No Yes
Deleted Activities - Unmeasured Hours 46 No Yes
Hauling to Shipping - Cost 54 No Yes
Hauling to Shipping - Earned Hours 24 No Yes
Hauling to Shipping - Measured Hours 23 No Yes
Hauling to Shipping - Pallets 25 No Yes
Loading - Cartons 31 No Yes
Loading - Cost 57 No Yes
Cancel
Save
Print List
Add
Edit
Delete
77 active + 1 deleted + 32 available of 110 allocated, 9999 maximum

The datafield is displayed in the list with the words "To be deleted" in the Action column. If the data is to be merged into another datafield the Action column will also display this datafield. The datafield is not actually deleted from the DataDiary until the **Save** button on the screen that list the datafields is clicked. The datafield is then deleted from the active DataDiary.

If any datafields are being deleted the following message is displayed.

ProRep
The DataDiary contains deleted datafields. The space occupied by deleted datafields cannot be re-used until the DataDiary is purged. The DataDiary can be purged now or later when it is more convenient. To purge, from the File menu, select Maintenance then Purge Deleted Datafields.
OK

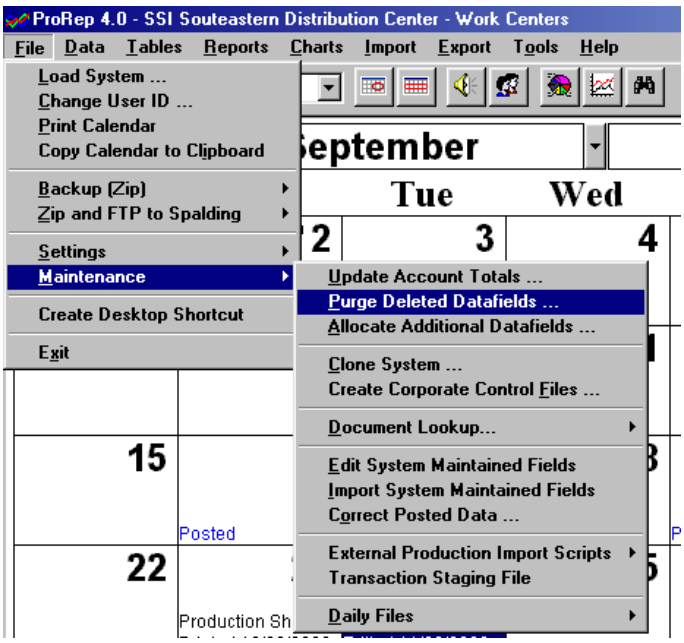
The DataDiary must be purged before the space can be reclaimed.

The master file can be purged at any time. Purging the database may take some time; the system will not be adversely affected if it is not purged immediately.

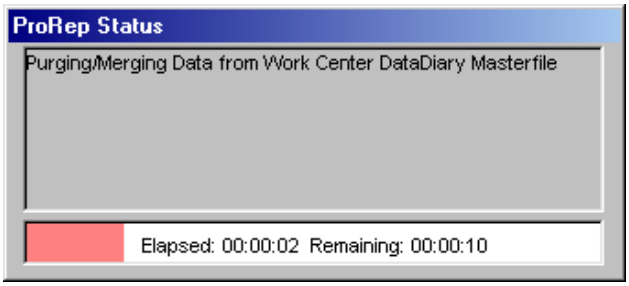
The next time the list of datafields is displayed, the datafield may or may not appear in the list. If it has been deleted from all DataDiaries it will not appear in the list. If it is active in any of the other DataDiaries it will still appear in the list with the word "No" in the Active in this DataDiary column.

Purging Deleted Datafields from the DataDiary

After a datafield is deleted the space is not available for reuse until the DataDiary is purged. To purge the DataDiary, make sure that the correct Active DataDiary is selected, then from the menu bar, select **File > Maintenance > Purge Deleted Datafields**.



A box is displayed that shows the progress of the purging process.



Before a DataDiary is purged, it is automatically backed up. When a DataDiary is being backed up, the process can be canceled by clicking the **Abort** button without causing harm to the DataDiary.

If the power goes out, the server goes down or any other event causes an abnormal termination while reorganizing the DataDiary, it is unusable. Therefore, it is automatically restored from the backup copy the next time the DataDiary is accessed.

Fiscal Calendar

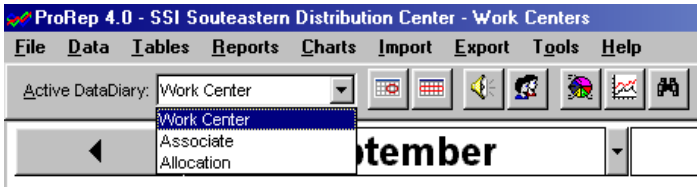
All organizations maintain a fiscal calendar for accounting purposes. Some organizations use the normal calendar that runs from January 1st to December 31st. Most organizations use a fiscal calendar based on weeks. These types of fiscal calendars begin each year on the same day of the week such as a Sunday. Many

fiscal calendars begin in a month other than January. When a new ProRep system is created, the fiscal calendar structure is established and the number of years of information to keep in each DataDiary is specified.

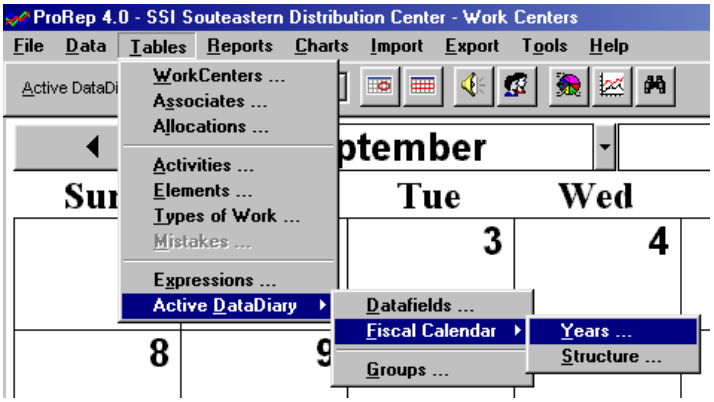
It is recommended that the fiscal calendar set up in ProRep is the same as that used for accounting purposes. This will make it easier to compare budgets and actual results reported by accounting to the data in ProRep's DataDiaries.

Adding a New Year

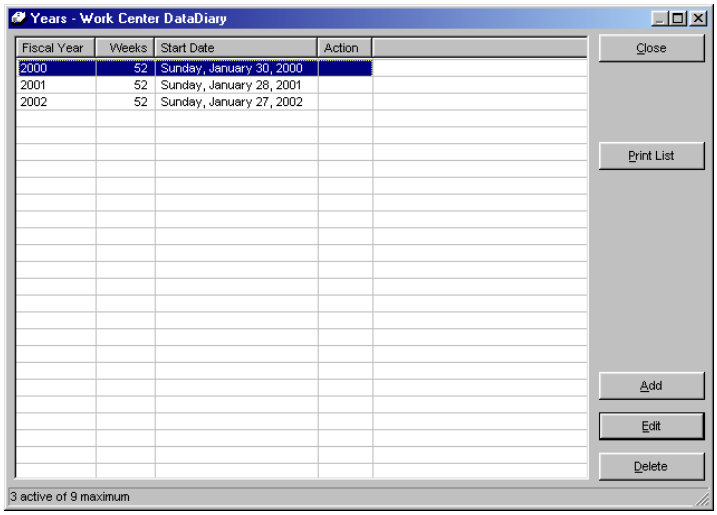
To add a new year or to change any of the settings for a year, make sure that the correct the active DataDiary is selected.


ProRep 4.0 - SSI Souteastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Work Center
Associate
Allocation

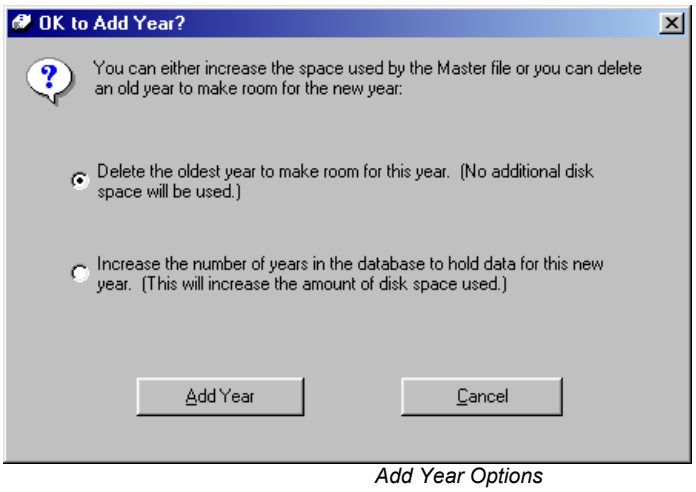
Then, from the menu bar select Tables, Active DataDiary, Fiscal Calendar, Years.



The years currently in the system are displayed.



To add a new year click the **Add** button. This displays the following dialog box.

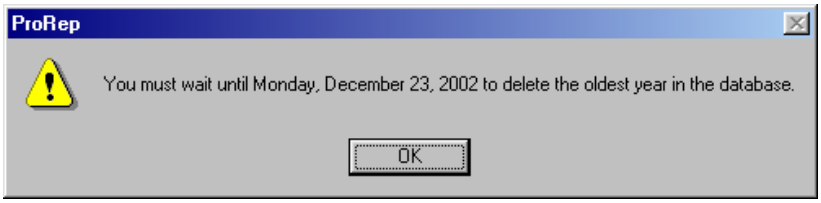

OK to Add Year?
You can either increase the space used by the Master file or you can delete an old year to make room for the new year:
Delete the oldest year to make room for this year. (No additional disk space will be used.)
Increase the number of years in the database to hold data for this new year. (This will increase the amount of disk space used.)
Add Year
Cancel

Add Year Options

When a year is added to the DataDiary, space for that year must be created. The DataDiary will hold up to nine years. There are two ways to create space in the DataDiary:

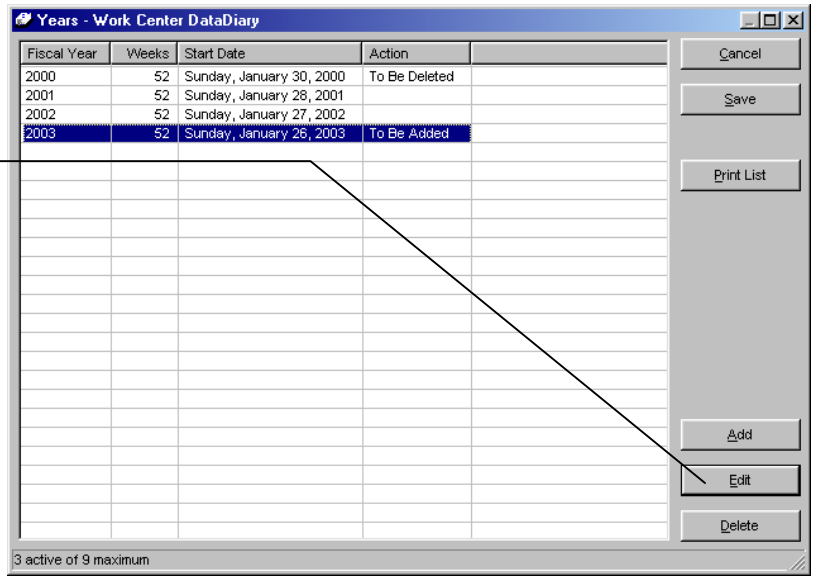
- Delete an old year to make room for the new year. The data for the oldest year in the DataDiary will be deleted.
- Increase the space DataDiary uses on the disk. The new year is added without deleting any previous years.

Click on the desired radio button and then click the **Add Year** button.



A year can not be deleted until six weeks are left in the current year.

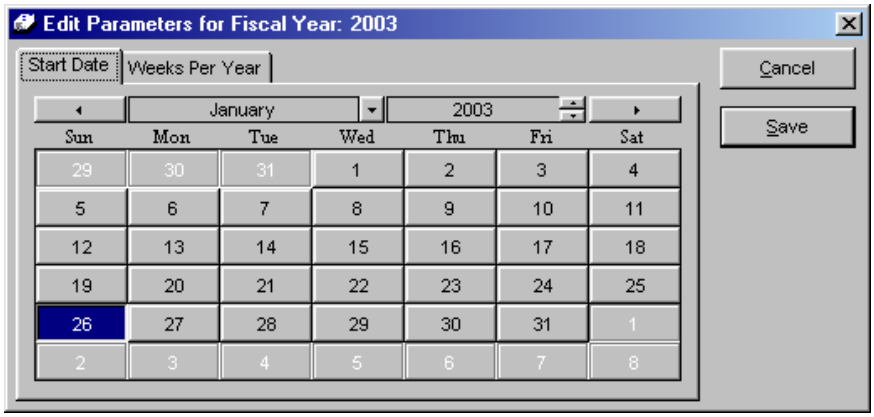
To change the start date or number of weeks in a fiscal year, click on the year and then click Edit.



The list of years is displayed showing which year will be added and optionally which year will be deleted. A year is not actually added or deleted until the **Save** button is clicked, to cancel the operation click the **Cancel** button. **Warning: Once a year is deleted the data can not be recovered.**

Specifying the First Day of a Fiscal Year

When a new ProRep system is created, the start date of the fiscal year is specified. If it becomes necessary to change the fiscal year start date, from the list of years, click the year and click the **Edit** button.

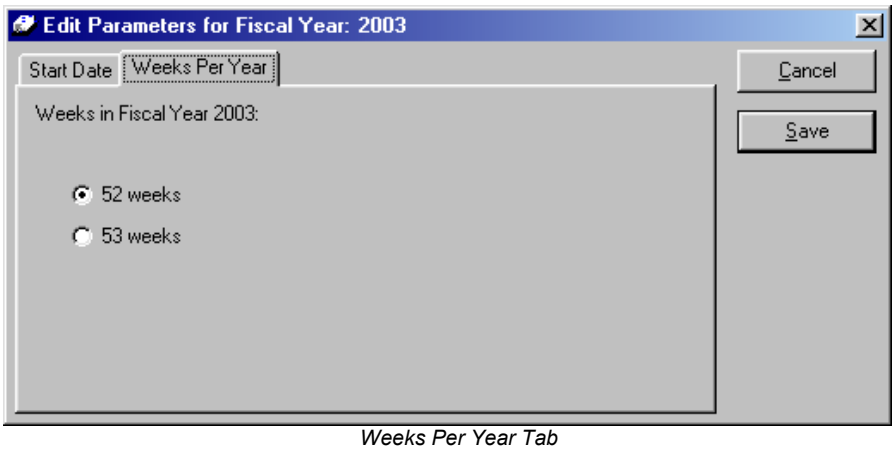

Edit Parameters for Fiscal Year: 2003
Start Date
Weeks Per Year
Cancel
Save
January
2003
Sun Mon Tue Wed Thu Fri Sat
29 30 31 1 2 3 4
5 6 7 8 9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31 1
2 3 4 5 6 7 8

Edit Fiscal Calendar Start Date Tab

On the Start Date tab, click on the desired start date in the calendar control and click the **Save** button. The start date in all years will be adjusted based on the new start date of the selected year.

Specifying a 53 week year

Because there are not exactly 52 weeks in a year (365 / 7 = 52.15) every so often a fiscal year is 53 weeks long. If a year has 53 weeks, an extra week is added into the last period for this year only. From the list of years, click the year, click the **Edit** button and select the Weeks Per Year tab.



Weeks Per Year Tab

Click the radio button for 52 or 53 weeks and click the **Save** button.

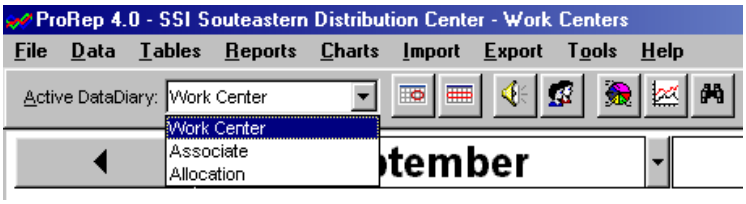
Fiscal Calendar Structure

The structure of the fiscal calendar is user defined. The structure consists of the fiscal calendar type, number of accounting periods in a year, first month or period in the calendar, and the number of weeks per period.

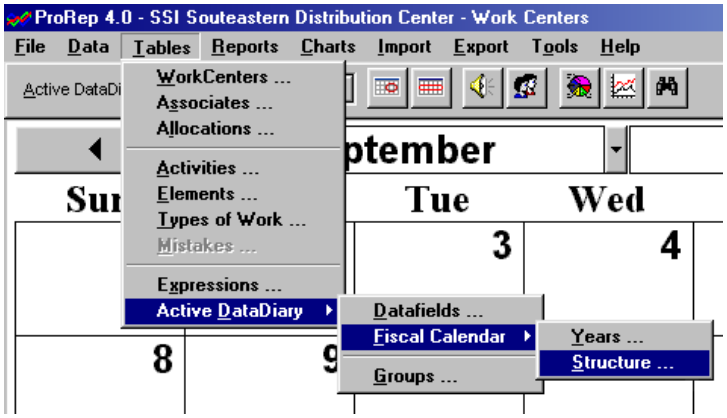
The fiscal calendar is set up and maintained through a wizard. The dialog presented on each page of the wizard is dependent on settings selected on previous pages. The example presented in this section is for setting up the most popular type of fiscal calendar. It is used by nearly all retailers and consumer goods manufacturers. This fiscal calendar has the following characteristics:

- 12 months per year that are sometimes called periods
- Each month is either 4 or 5 weeks long
- February is the first month in the fiscal year

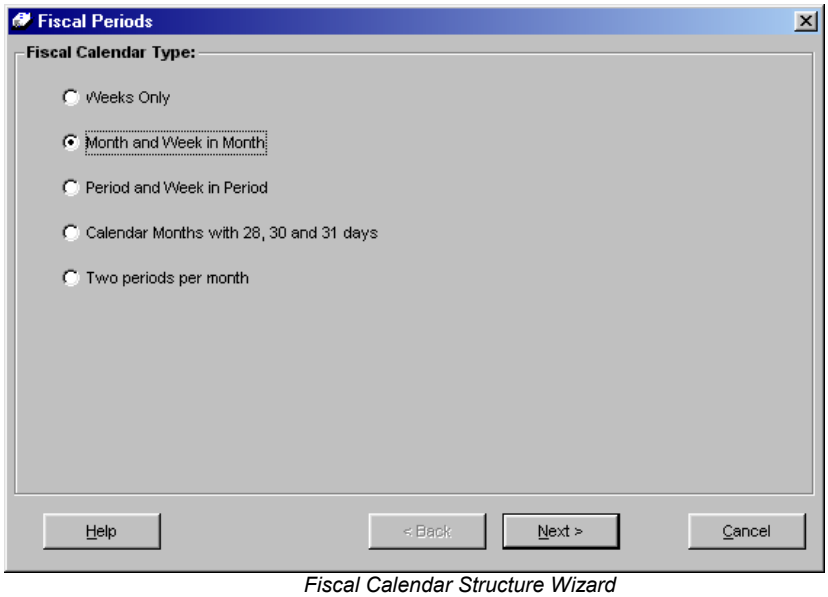
To edit the structure of the fiscal calendar, make sure that the correct the active DataDiary is selected.



Then from the menu bar select **Tables > Active DataDiary > Fiscal Calendar, Structure.**

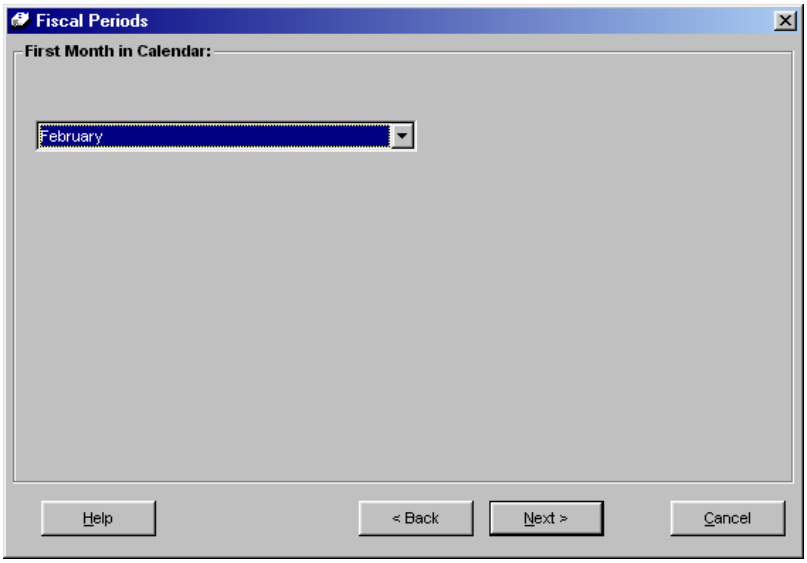


This starts the fiscal calendar structure wizard.

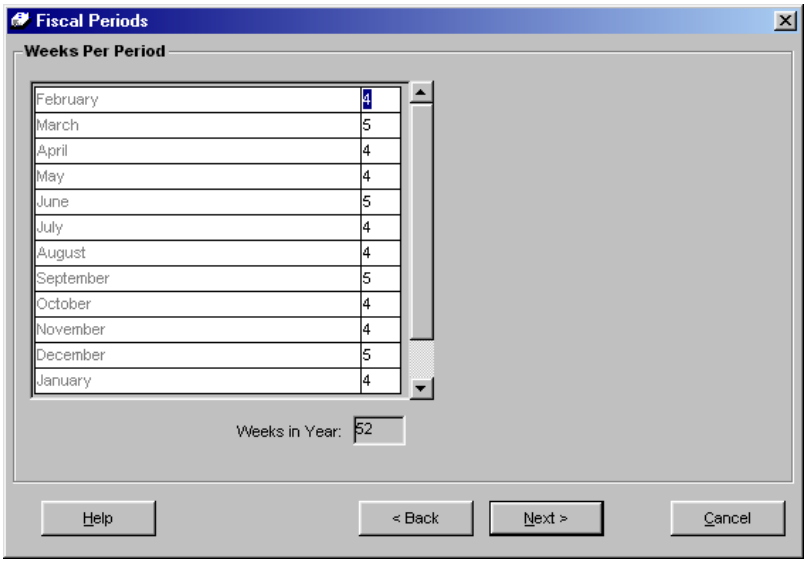


Fiscal Calendar Structure Wizard

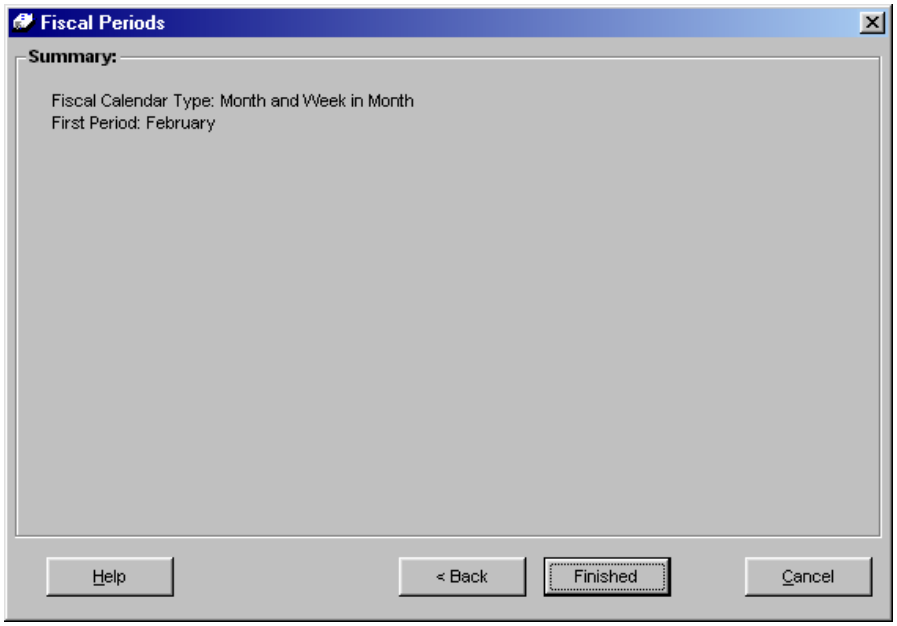
ProRep supports five different types of fiscal calendars. Select the type of fiscal calendar by clicking on the radio button and click **Next**.



A fiscal calendar can start in any month. Select the first month in the calendar and click **Next**.



The number of weeks in each period is specified. They must total 52. Select the number of weeks in each period and click **Next**.



The last page of the wizard displays the selected settings. To make changes click **Back**. To save and exit click **Finished**.

Changes made to the structure of the fiscal calendar do not change any data in the DataDiary. If a mistake has been made, the fiscal calendar structure can be changed back with no affect on the data.

Chapter 7: Setting Up Activities

This chapter discusses how to set up the activities that the associates perform. This includes those activities that have performance standards and those that do not. This chapter also discusses how to setup the tables necessary to support quality measurement and reporting.

Before activities are set up, elements and types of work should be entered into their respective tables. Elements are the different kinds of units produced when an activity is performed. Types of work are categories used to group activities and produce subtotals on reports.

Quality is audited, measured and reported by type of work. Before setting up types of work for quality measurement, entries should be entered into the mistake table. Mistakes are the different reasons for an item failing a quality audit.

Elements

When an activity is entered on an associate's production sheet, time and optionally units produced are also entered. The units produced are called elements. When an activity is set up, elements that will be recorded for the activity are selected from a list.

Following are the elements in our example system:

- Cartons
- Lines
- Pallets
- Shipments
- SKU's

Activities that are measured nearly always have one or more elements for which units produced are recorded. Activities like breaks, meetings and cleanup that do not have standards usually do not have elements. However, activities that do not have standards can have elements. Following is an example of the elements for the Receive Common Carrier activity:

Activity Description: ***Receive Common Carrier***

Elements: *Shipments*

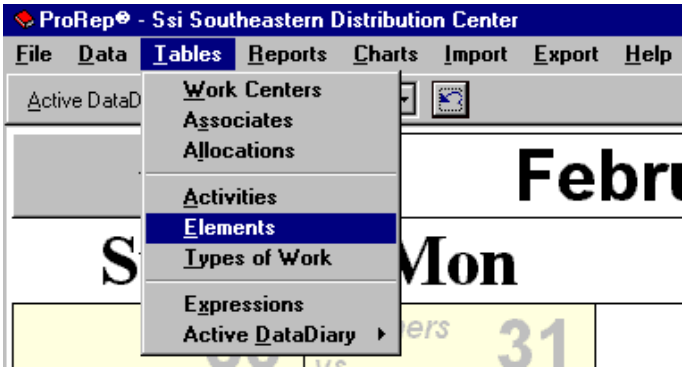
SKU's

Lines

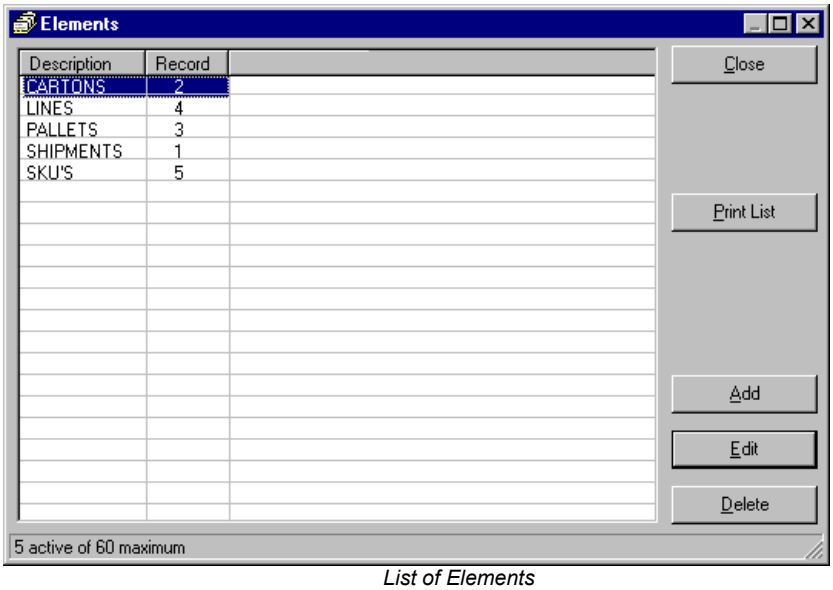
There can be a maximum of 999 elements.

Adding or Editing an Element

To set up a new or edit an existing element, from the menu bar select Tables, Elements.

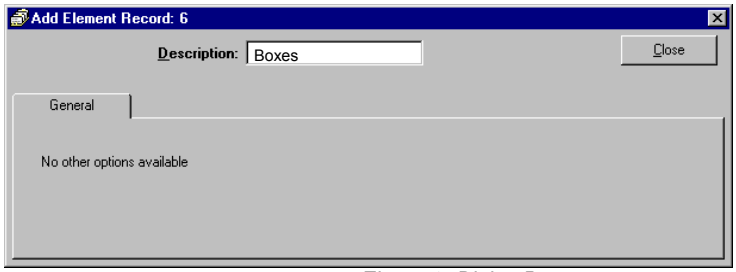


A list of previously defined elements is displayed.



List of Elements

To add a new element, click the Add button. To edit an existing element, click on the element and click the Edit button.



Elements Dialog Box

Enter a description of up to 15 characters. The element description is also used as its code. Therefore, the description must be unique. When entering units produced for an activity, its the element descriptions are displayed.

When an element is added to an activity, a datafield is added into each of the three DataDiaries for the element. The datafield name consists of both the activity description and the element description. For example, Receive Common Carrier - Cartons. If an element's description is changed, the description of every datafield for the element will be changed.

Deleting an Element

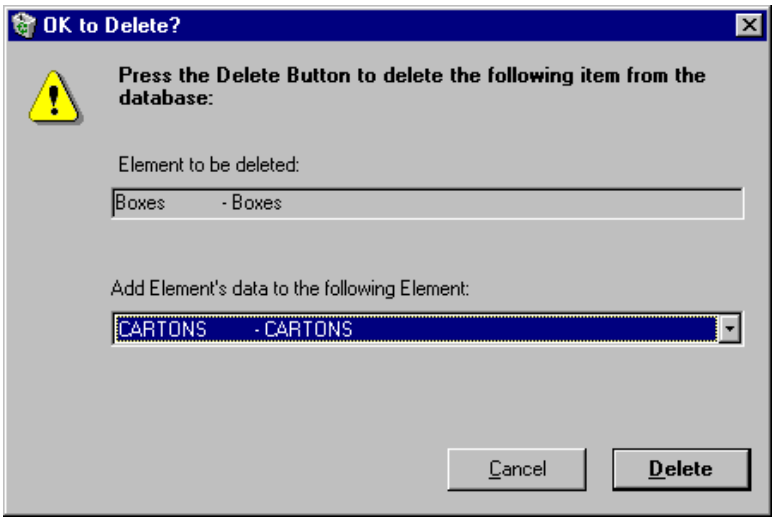
An element cannot be deleted if it is used on any activities. If an element is not used on any activity and it is no longer needed, you have three choices:

- Keep the element and its data in the DataDiaries.
- Delete the element and merge its data into another element's datafields.

For example, you originally set up an element named boxes and later added an element named cartons. A couple of activities were added with the element named boxes. Later, several more activities were added with the element named cartons. Now you want to standardize and always use the word cartons. To do this, add the element named cartons to the activities that use the element named boxes. Then delete the element boxes and add its data into cartons.

- Delete the element and its data from the DataDiaries. **Caution:** Choose this option with great care. Once the data is deleted it cannot be restored.

To delete an element, click on the element and click the Delete button. The delete element dialog box is displayed.


OK to Delete?
Press the Delete Button to delete the following item from the database:
Element to be deleted:
Boxes - Boxes
Add Element's data to the following Element:
CARTONS - CARTONS
Cancel
Delete

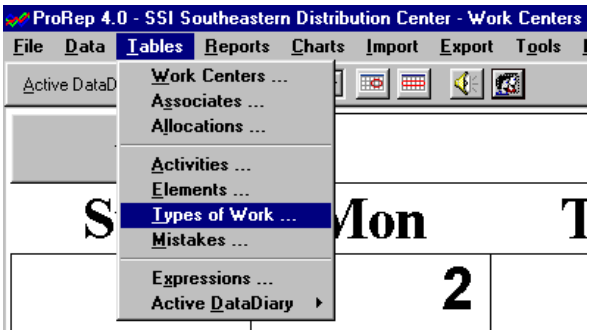
Delete Element Dialog Box

If the element's data is to be summed into another element, select the element from the pull down list. To actually delete the element, click the delete button.

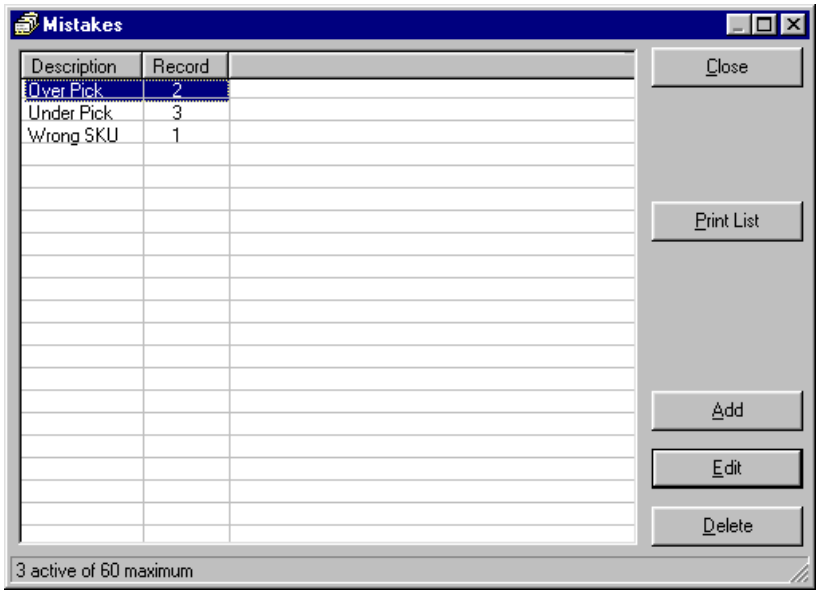
Mistakes

Mistakes are the reasons why an item fails a quality audit. Mistakes are associated with types of work when the quality feature is used. See the types of work section in this chapter for more information.

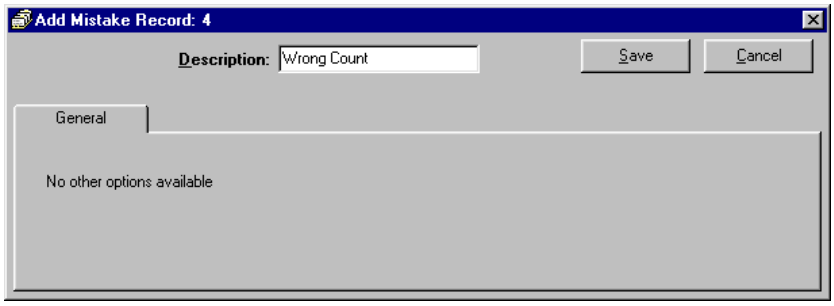
To add or edit a mistake select Tables, Mistakes.



A list of previously defined mistakes will be displayed.



To add a new mistake click Add, to edit a mistake click Edit.



Enter a description for the type of the mistake and click Save.

Types of Work

An activity can be assigned a type of work for the purpose of grouping like activities. For example, some pre-defined reports are printed with the activities listed in type of work order with subtotal breaks. If the Quality Measurement feature is used, the results of audits are entered and tracked by type of work.

Following are two of the types of work in our example system:

Type of Work: ***Data Entry***

Activities:
- *Order Entry*
- *Pick Adjustments*
- *Receiving Data Entry*

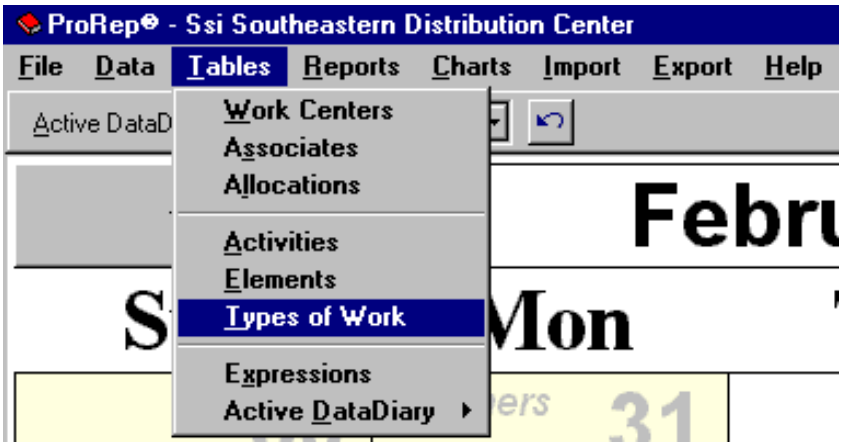
Type of Work: ***Receiving***

Activities:
- *Receive Common Carrier*
- *Receive Consolidated*
- *Receive Small Shipments*

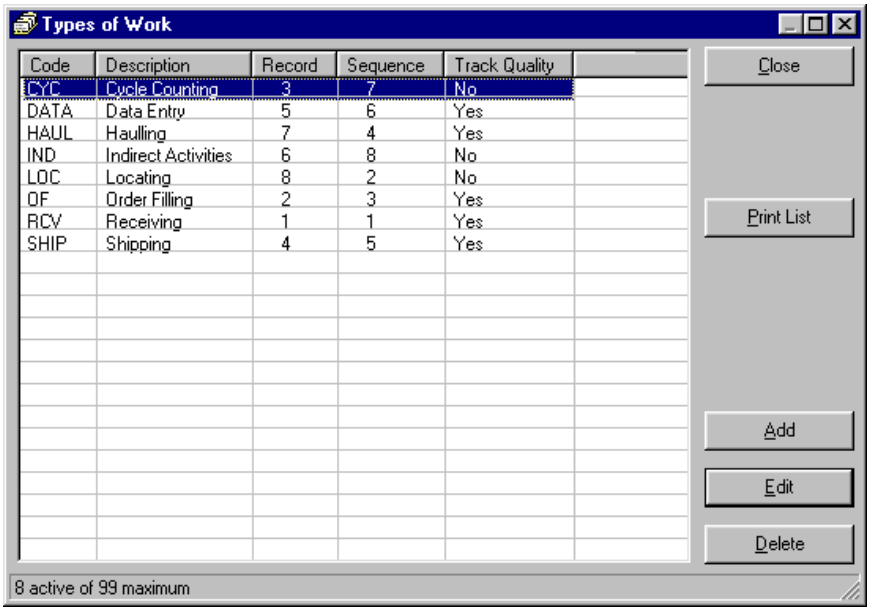
There can be a maximum of 99 types of work. The use of the type of work feature is optional. It is not necessary to set up types of work, although it is recommended. Also, it is not required that a type of work is declared for an activity.

Adding or Editing a Type of Work

To set up a new or edit an existing type of work, from the menu bar select Tables, Types of Work.



A list of previously defined types of work is displayed.



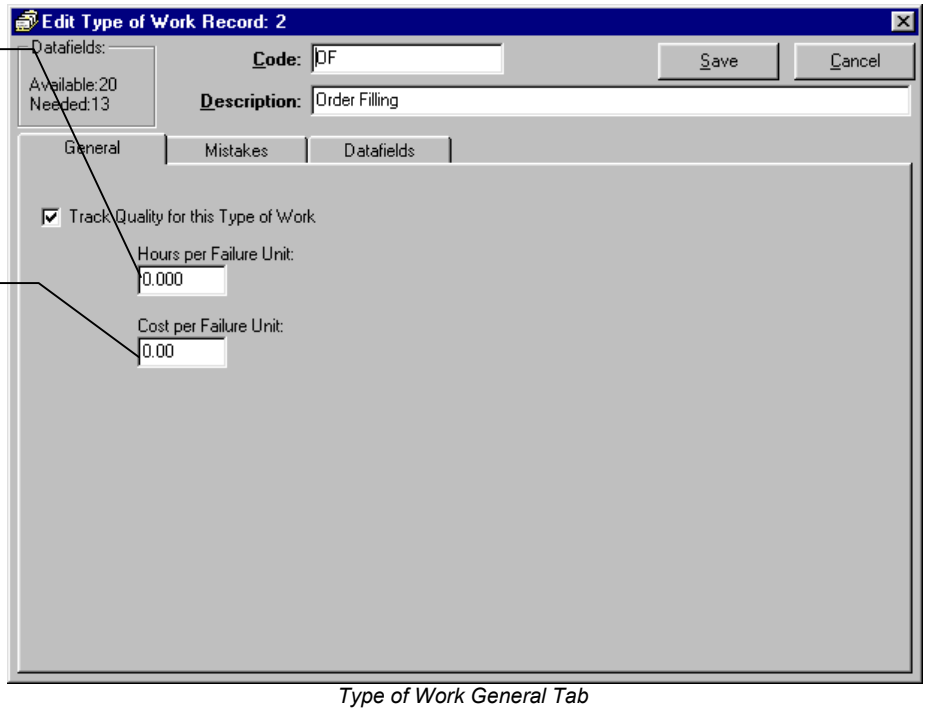
List of Previously Defined Types of Work

To add a new type of work, click the Add button. To edit an existing type of work, click on the type of work and click the Edit button.

The hours per failure unit can be used to reduce the amount of incentive an associate is paid.

Cost per failure unit assigns a dollar cost per failed unit.

NOTE: A failure unit is a unit with at least one problem e.g. wrong SKU. A failed unit can have more than one problem e.g. wrong SKU and wrong



Type of Work General Tab

Enter a code that uniquely identifies this type of work. The code can be any combination of up to 10 letters and numbers. The type of work's code is primarily used when entering data on quality auditor sheets. Therefore it should be short but easy to recognize. Enter a description of up to 30 characters.

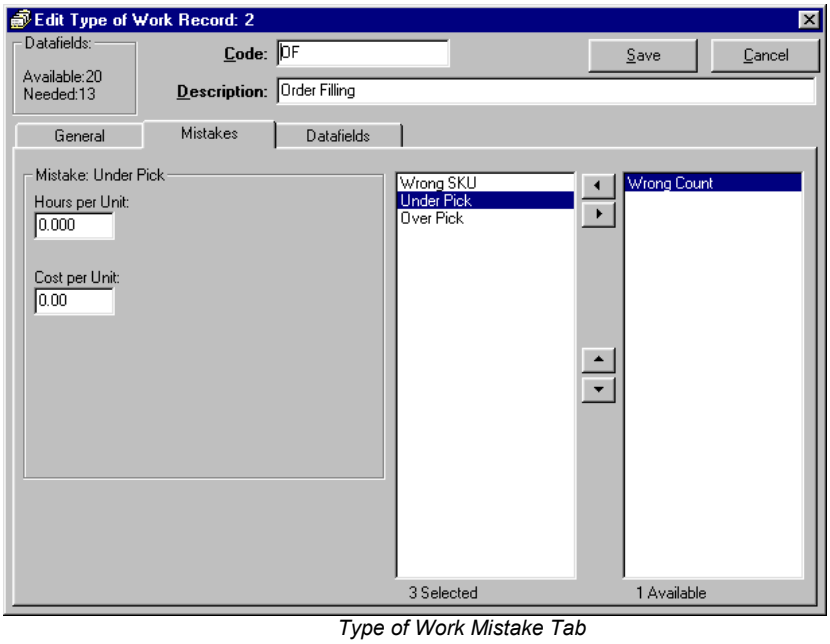
Enabling the Measurement of Quality for a Type of Work

Before the quality of any type of work can be tracked, ProRep's quality measurement features must be enabled as described in *Appendix B Setting Up the Quality Features*. To track quality for a type of work, on the General tab check the box next to Track Quality for this Type of Work.

The track quality setting will allow units audited and units failed to be entered on daily quality sheets. Datafields for the type of work will be set up in all three DataDiaries for audited units, audited occurrences, failed units and failed occurrences. If the tracking of quality monetary cost and hours features are enabled, datafields will also be set up for failure cost and failure hours.

Specifying the Reasons Why an Item Fails a Quality Audit

To specify why an item fails an audit, on the Mistakes tab, select the mistakes that can occur when performing the type of work.



Type of Work Mistake Tab

Datafields for the type of work's mistakes will be set up in all three DataDiaries for mistake units and mistake occurrences.

Tracking the Cost of Quality Failures

The cost of quality can be measured in money or time. The selections to specify if and how the cost of quality is to be measured is part of the overall quality settings described in *Appendix B Setting Up the Quality Features*. A monetary or time cost can be specified for both a type of work failure and its mistakes.

To specify the amount of money or hours that a failure costs, on the General tab enter the monetary amount or hours. To specify the amount of money or hours that each type of mistake costs, on the Mistakes tab highlight each mistake and enter the monetary amount or hours.

Usually the quality costs are associate with either the failure or the various types of mistakes. Seldom would there be costs associated with both a failure *and* the types of mistakes.

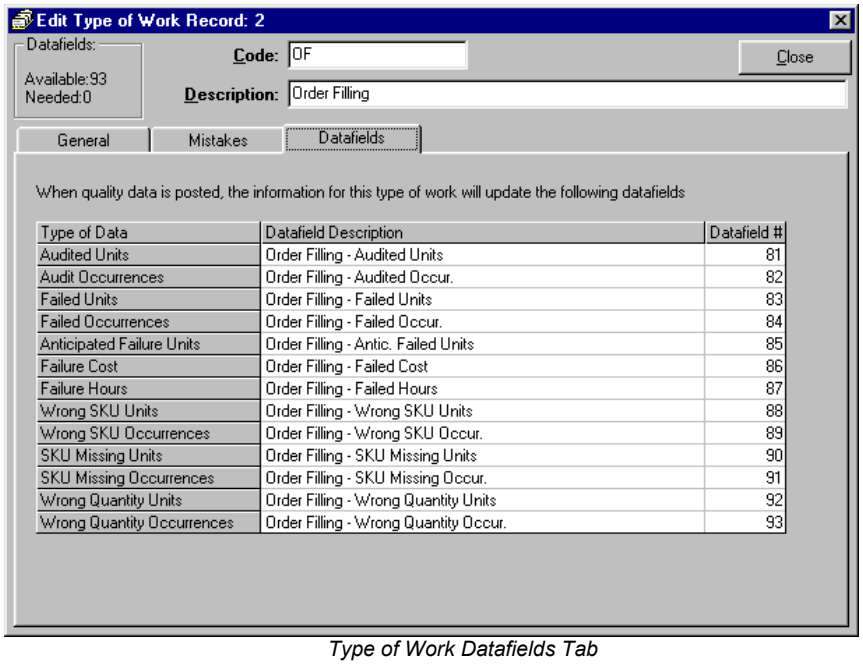
For example, if an item is scrapped as the result of a quality failure without regard to the reason for the mistake, the cost should be associated with the failure. If an item that fails an audit can be made usable through rework, and the amount of rework depends on the type of mistake, different costs should be specified for each type of mistake.

Reducing Incentive Pay as a Consequence of Quality Failures

The selection to specify if quality failures reduce incentive pay is specified in the overall incentive settings described in *Appendix A Setting Up the Incentive Module*. The entries into the type of work's Hours per Failure Unit and Hours per Mistake Unit fields control how much time is subtracted from the incentive pay hours.

Displaying the Type of Work's Datafields

Clicking the Datafields tab displays the following list:


Edit Type of Work Record: 2
Datafields:
Available:93
Needed:0
Code: OF
Close
Description: Order Filling
General
Mistakes
Datafields
When quality data is posted, the information for this type of work will update the following datafields
Type of Data | Datafield Description | Datafield #
Audited Units | Order Filling - Audited Units | 81
Audit Occurrences | Order Filling - Audited Occur. | 82
Failed Units | Order Filling - Failed Units | 83
Failed Occurrences | Order Filling - Failed Occur. | 84
Anticipated Failure Units | Order Filling - Antic. Failed Units | 85
Failure Cost | Order Filling - Failed Cost | 86
Failure Hours | Order Filling - Failed Hours | 87
Wrong SKU Units | Order Filling - Wrong SKU Units | 88
Wrong SKU Occurrences | Order Filling - Wrong SKU Occur. | 89
SKU Missing Units | Order Filling - SKU Missing Units | 90
SKU Missing Occurrences | Order Filling - SKU Missing Occur. | 91
Wrong Quantity Units | Order Filling - Wrong Quantity Units | 92
Wrong Quantity Occurrences | Order Filling - Wrong Quantity Occur. | 93

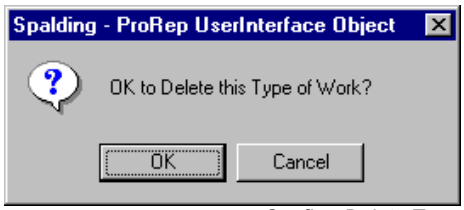
Type of Work Datafields Tab

This is a list of the datafields in the work center, associate and allocation DataDiaries that hold the results of performing the audits. These datafields are automatically set up and system-maintained. The datafields can be used on user-defined reports and charts.

Deleting a Type of Work

A type of work can only be deleted when there are no activities that use it. If the Quality Measurement module is not used, there is no data kept for a type of work. Therefore, deleting a type of work simply removes it from the table.

To delete a type of work, click on the type of work and click the Delete button. A confirmation message is displayed.



Confirm Delete Types of Work Dialog Box

After selecting the Yes button to confirm deletion, the type of work is removed from the list.

If the Quality Measurement module is used, there are datafields in the DataDiaries that contain data that are associated with the types of work. Therefore, when the

Quality Measurement module is used and a type of work is deleted, you have three choices:

- Keep the type of work and its data in the DataDiaries.
- Delete the type of work and merge its data into another type of work's datafields.
- Delete the type of work and its data from the DataDiaries. **Caution:** Choose this option with great care. Once the data is deleted it cannot be restored.

Activities

In ProRep, the associate's entire work day must be accounted for. The time is assigned to various user-defined activities. The only exception is time for which the associate is not paid. Examples of this are lunch, a doctor's appoint or a parent-teacher conference. ProRep handles this by means of pre-defined activity codes that are used when the associate's production sheet data is entered or imported.

Following are the user-defined activities in our example system:

- Break
- Cleanup
- Cycle Counting
- Hauling to Shipping
- Loading
- Meeting
- Order Entry
- Pick Adjustments
- Picking
- Put Away
- Receive Common Carrier
- Receive Consolidated
- Receiving Data Entry
- Receive Small Shipments
- Staging
- Training

There can be a maximum of 999 activities.

Datafields in each of ProRep's three DataDiaries are automatically set up when an activity is added. The datafields hold the results of performing the activity. Depending upon how the activity is set up, datafields are created for:

- Measured hours
- Unmeasured hours
- Earned hours
- Cost

- Each element's units

Note: The DataDiary must contain enough unused allocated datafields to allow the datafields for an activity to be set up. If an error message is displayed stating "There are not enough datafields to hold the data for this activity," more datafields must be added.

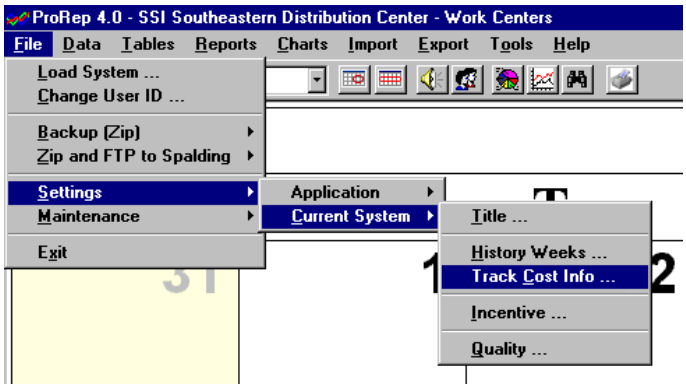
Spalding - ProRep UserInterface Object
The are not enough Datafields available to hold the data for this activity. You must allocate more fields before saving the Activity with the current settings. You need 12 additional fields, and only have 11 available.
OK

To add more datafields, in Chapter 6 Creating and Maintaining the Tables, see the section titled Datafields, and the topic Allocating Space for More Datafields.

Tracking the Cost of an Activity

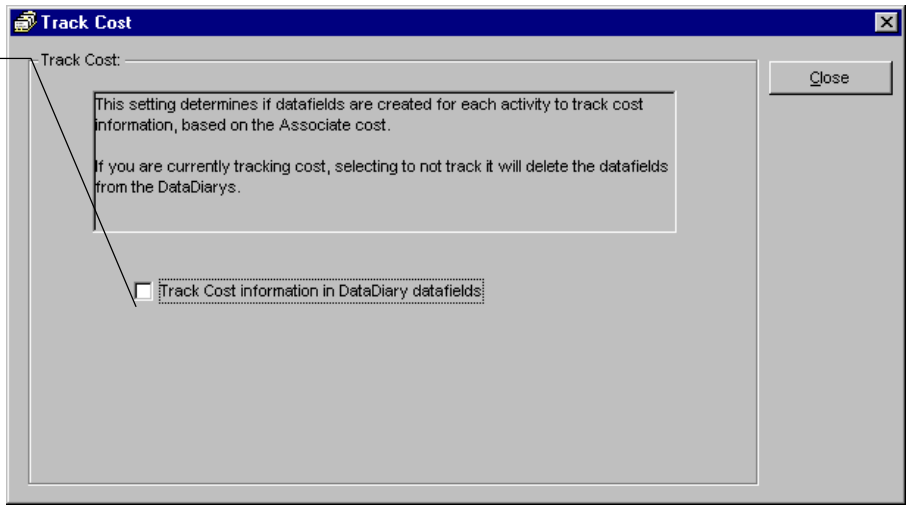
Optionally, the cost of performing activities can be tracked. By default, the cost of activities is not tracked. There is a setting that specifies if cost is tracked. If the track cost setting is specified, the cost of all activities is tracked. Cost datafields are automatically set up in the work center, associate and allocation DataDiaries for each activity. An activity's cost if calculated by multiplying the associate's hourly cost by the hours spent performing the activity.

To track the cost of performing an activity, select Settings, Current System, Track Cost Info.



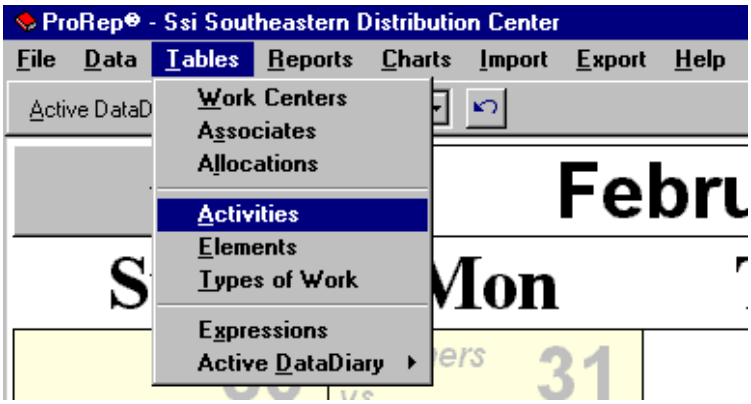
The following dialog box will be displayed.

To Track cost check this box.

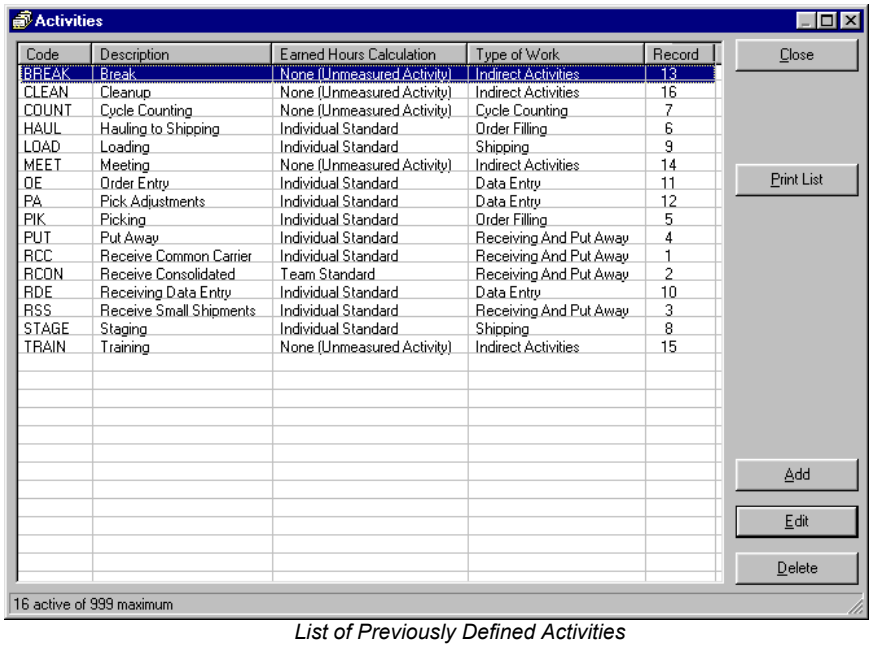

Track Cost
Track Cost:
This setting determines if datafields are created for each activity to track cost information, based on the Associate cost.
If you are currently tracking cost, selecting to not track it will delete the datafields from the DataDiarys.
Track Cost information in DataDiary datafields
Close

Adding or Editing an Activity

To add or edit an activity, from the menu bar select Tables, Activities.

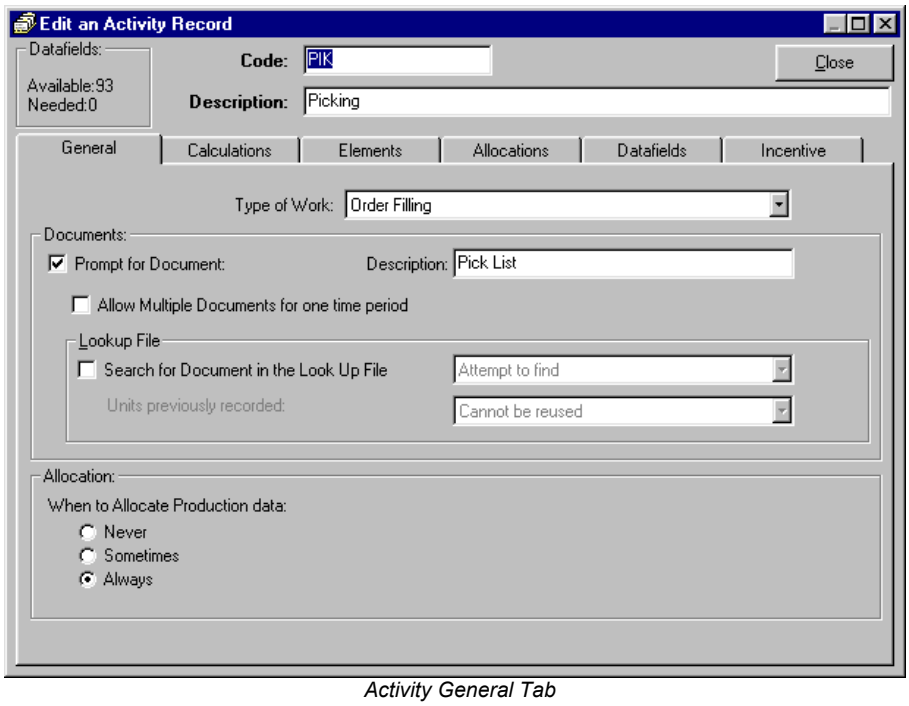


A list of previously defined activities is displayed.


Activities
Code
Description
Earned Hours Calculation
Type of Work
Record
BREAK Break None (Unmeasured Activity) Indirect Activities 13
CLEAN Cleanup None (Unmeasured Activity) Indirect Activities 16
COUNT Cycle Counting None (Unmeasured Activity) Cycle Counting 7
HAUL Hauling to Shipping Individual Standard Order Filling 6
LOAD Loading Individual Standard Shipping 9
MEET Meeting None (Unmeasured Activity) Indirect Activities 14
OE Order Entry Individual Standard Data Entry 11
PA Pick Adjustments Individual Standard Data Entry 12
PIK Picking Individual Standard Order Filling 5
PUT Put Away Individual Standard Receiving And Put Away 4
RCC Receive Common Carrier Individual Standard Receiving And Put Away 1
RCON Receive Consolidated Team Standard Receiving And Put Away 2
RDE Receiving Data Entry Individual Standard Data Entry 10
RSS Receive Small Shipments Individual Standard Receiving And Put Away 3
STAGE Staging Individual Standard Shipping 8
TRAIN Training None (Unmeasured Activity) Indirect Activities 15
Close
Print List
Add
Edit
Delete
16 active of 999 maximum

List of Previously Defined Activities

To add a new activity, click the Add button. To edit an existing activity, highlight the activity click the edit button. The activity dialog is displayed.



Activity General Tab

Specifying the Activity's Identification Code

Enter a code that uniquely identifies this activity. The code can be any combination of up to 10 letters and numbers. The activity code is used when entering and importing production data.

Although activity codes can consist of only numbers, it is not recommended for several reasons. Using the codes PIK and PUT for the activities Picking and Put Away is easier to remember than using the codes 312 and 321. It is also relatively easy to accidentally key in 321 when you meant to key in 312.

Entering the Activity's Description

Enter a description of up to 30 characters. The description will also become part of the descriptions of the datafields that are created in the DataDiaries to hold data for the activity.

Specifying the Activity's Type of Work

The activity's type of work is selected on the General tab from the Type of Work pull down list. An activity can be assigned a type of work for the purpose of grouping like activities on certain pre-defined reports.

If the Quality Measurement module is used, the results of audits are entered and tracked by type of work. If the Quality Measurement module is being used and you want to track quality statistics for this activity, make sure that you select the appropriate type of work.

Specifying that Document Numbers will be Entered

If document numbers are to be entered for the activity on production sheets, check on the General tab, the Prompt for Document check box. In the box to the right, enter a description of up to 15 characters. This description is displayed as a prompt during production sheet entry.

Entering Multiple Documents for the Same Period of Time

In some cases when real-time self-entry of production data is used, associates are given several work assignments that they complete before entering them. For example, an associate is given three pick lists at 10:00am. The associate completes the three pick lists at 10:15 and immediately enters all three. Normally, ProRep would assume that the first pick list took 15 minutes to complete. It would assume that the second and third pick list took only a few seconds. The performance for the first pick list would be very low and the next two would be very high.

To instruct ProRep that the three pick lists share the time slot from 10:00 and 10:15, on the General tab, check the box next to Allow Multiple Documents for One Time Period.

When an associate using real-time self-entry enters the pick list production data for this activity, it will immediately prompt them for the second pick list and then the third. When all pick lists have been entered, the associate indicates that they are done entering documents for this time period.

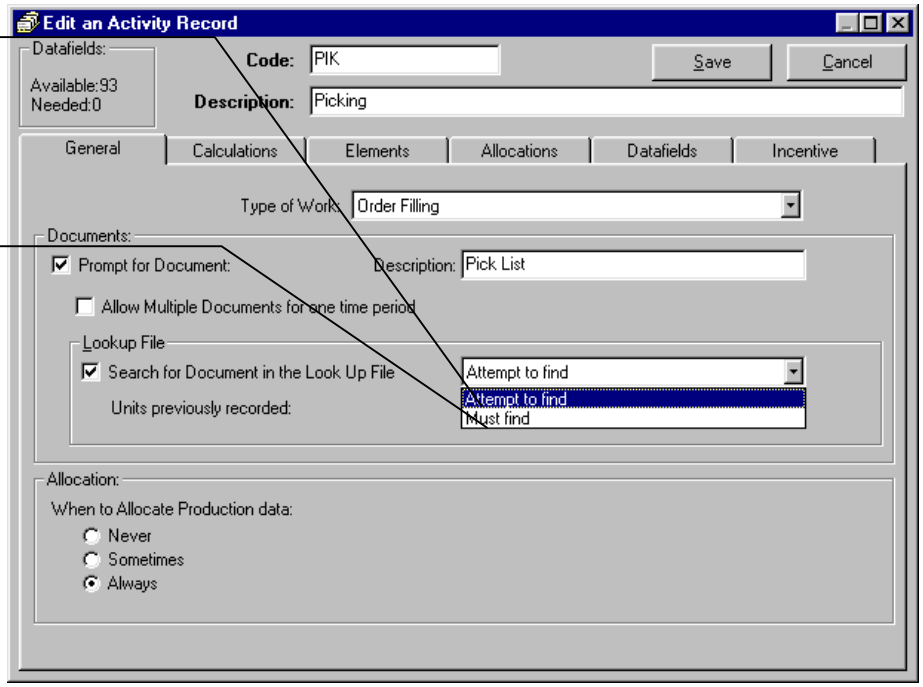
Getting Units from a File Created by Another System

ProRep can look up the units associated with a document number from a file created by another computer system. For example, if a warehouse management system creates a file containing pick list numbers along with the number of lines and cartons, ProRep can look up the units as the document numbers are entered. The look up can occur either during manual key entry of production sheets, or as an associate performs real-time self-entry of production data.

To instruct ProRep to lookup the document, on the General tab, check the box next to Search for Document in the Lookup File. From the pull down list on the right side, select one of the Look Up rules.

Attempt to find:
Look for the document in the lookup file. If it is not found, allow the user to manually enter units completed for the document.

Must find:
Look for the Document in the lookup file. If it is not found, consider it an invalid document number and do not allow the user to enter units completed.



The above lookup settings are applied as stated when an associate performs real-time self-entry of production data. However, when a production sheet is manually entered, all document lookups are handled as if the setting where set to attempt to find.

Reusing a Document's Units in the Lookup File

When there are multiple steps in a process, it is sometimes necessary for a downstream operation to reuse the units on a document that have already been used by an upstream operation. For example, an order is picked and then it is packed. Both activities have the element Lines. The associate that picked the order uses the document's lines and the associate that later packs the order needs to reuse the lines.

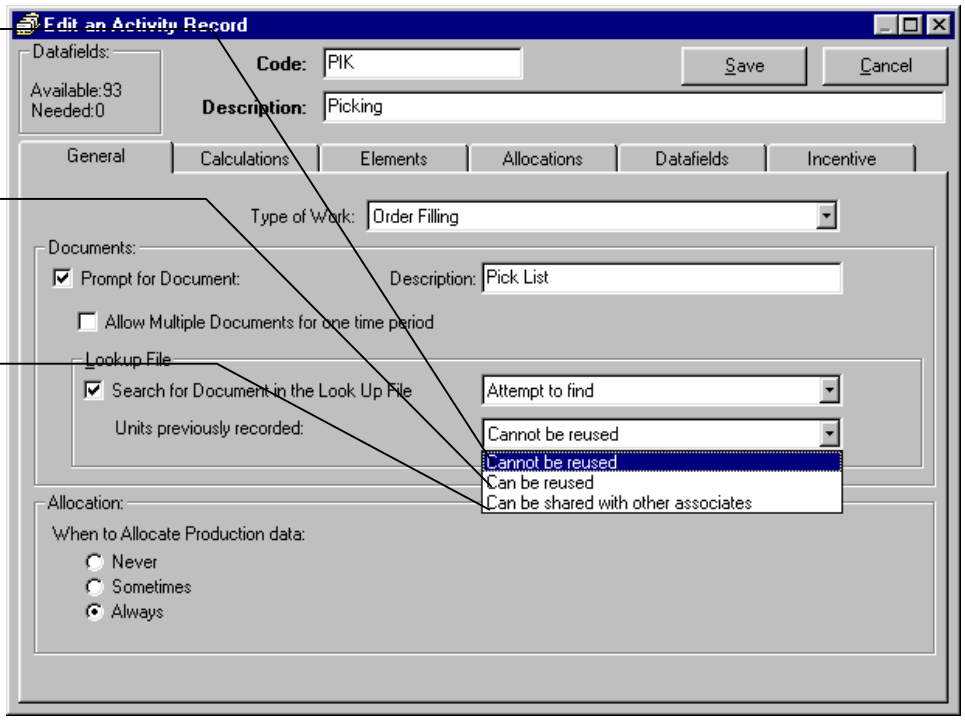
The best way to handle this situation is to create two different elements. One named Pick Lines and one named Pack Lines. This would eliminate the need to reuse units in the lookup file. Both elements' names and respective units would need to appear in the lookup file.

On the General tab, from the Units Previously Recorded pull down list, select one of the units usage rules.

Cannot be reused:
Do not allow units for a document and element that have been used to be reused by this activity.

Can be reused:
Allow units for a document and element that have been used to be reused by this activity.

Can be shared:
Allow the remaining units not used for a document and element to be used by this activity. For example, originally in the lookup file there were 100 lines for a pick list. One picker completed 60 of the lines. Allow another picker to enter up to 40 lines.



Distributing Hours and Units to an Allocation Account

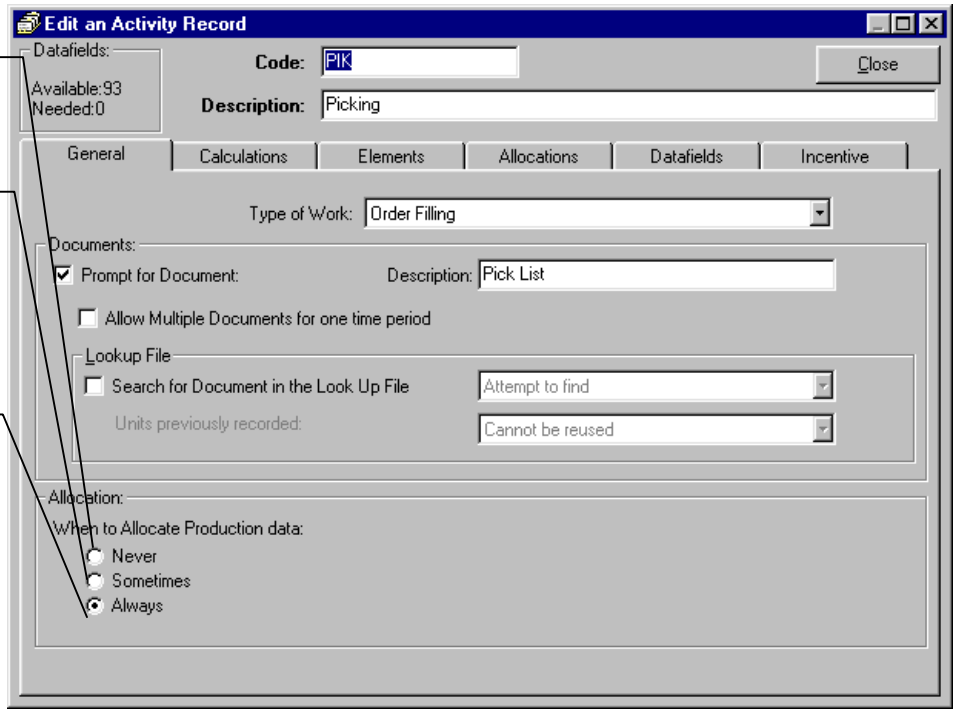
The hours, units and cost of the activity can be tracked by allocation. When a daily production sheet file is posted, the activity's data is always saved into the activity's datafields in the allocation DataDiary. If the activity's data is allocated, the data is saved into the allocation account specified on the production sheet. If the activity's data is not allocated, the data is saved into the allocation account named Not Allocated.

To specify how allocating is handled, on the General tab, in the When to Allocate Production Data section, click one of the radio button selections.

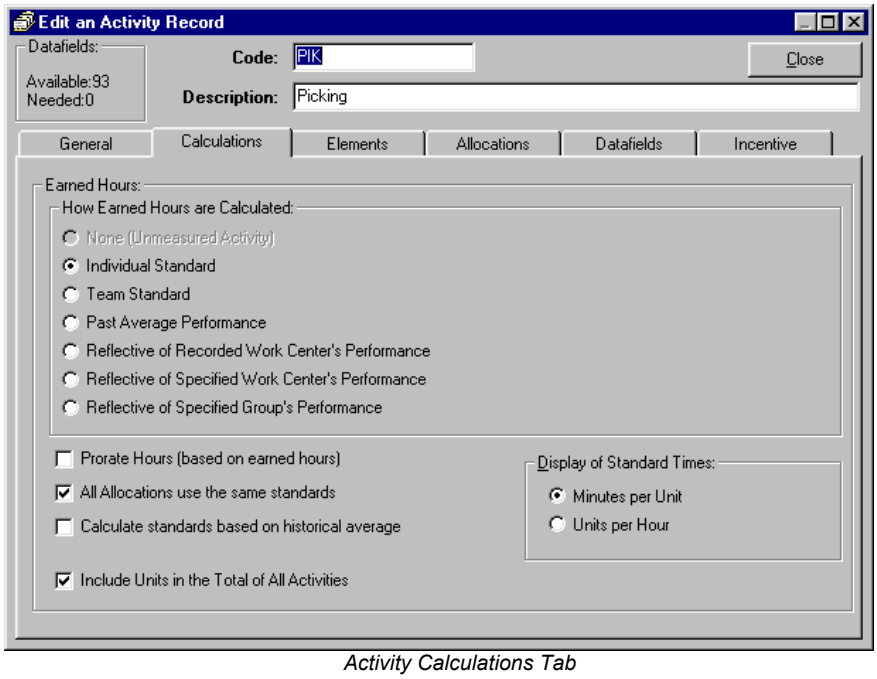
Never:
Do not prompt for an allocation account.

Sometimes:
Prompt for the allocation account. Allow selection of a specific allocation or the Not Allocated allocation.

Always:
Prompt for the allocation account. Only allow selection of a specific allocation. Do not allow selection of the Not Allocated allocation.



Clicking on the Calculations tab displays the following settings:



Activity Calculations Tab

Specifying that the Activity has No Standard

Activities like break, meeting and training do not have standards. The performance of these activities are not measured. Therefore, they are referred to as unmeasured.

To specify that an activity does not have a standard, on the Calculations tab, in the How Earned Hours are Calculated section, click the radio button for None.

Although, an activity is unmeasured, it can have most of the other characteristics of a measured activity. An unmeasured activity can have elements for which units are entered. Document numbers can be entered and time can be allocated.

Once an activity has been set up as having no standard, the earned hours calculation setting of None cannot be changed.

Specifying that the Activity has an Individual Standard

If an activity has an individual standard, the associate performing the activity receives the resulting earned hours. The associate's performance is dependent only on how well the individual performs the task. In most operations, the majority and in many cases all of the activities have individual standards.

To specify that an activity has an individual standard, on the Calculations tab, in the How Earned Hours are Calculated section, click the radio button for Individual.

Specifying that the Activity has a Team Standard

If an activity has a team standard, all associates performing the activity on the same team will have the same performance. The performance is the team's average. A team is defined as all of the associates that work on the team activity in the same work center and on the same team number. A maximum of 99 teams can work on the same team activity within one work center.

Team standards are used primarily in two situations:

- When it is difficult or time consuming to determine exactly how many units each associate completed.

For example, in shipping cartons are automatically sorted directly into 20 outbound trailers. A seven person crew loads the trailers. They are not assigned to specific doors. They move from door to door as needed. At the end of each shift, a report is produced that lists each door number along with the number of cartons that were sorted to it. The only way to determine the actual number of cartons each associate loaded is to have each person keep a manual tally. This would be a very tedious and time consuming. In this case, it would be best to make loading a team activity, have each associate keep track of their time by door, and enter each door's cartons using the door number (1 to 20) as the team number.

- When productivity is significantly enhanced by associates helping or cooperating with each other.

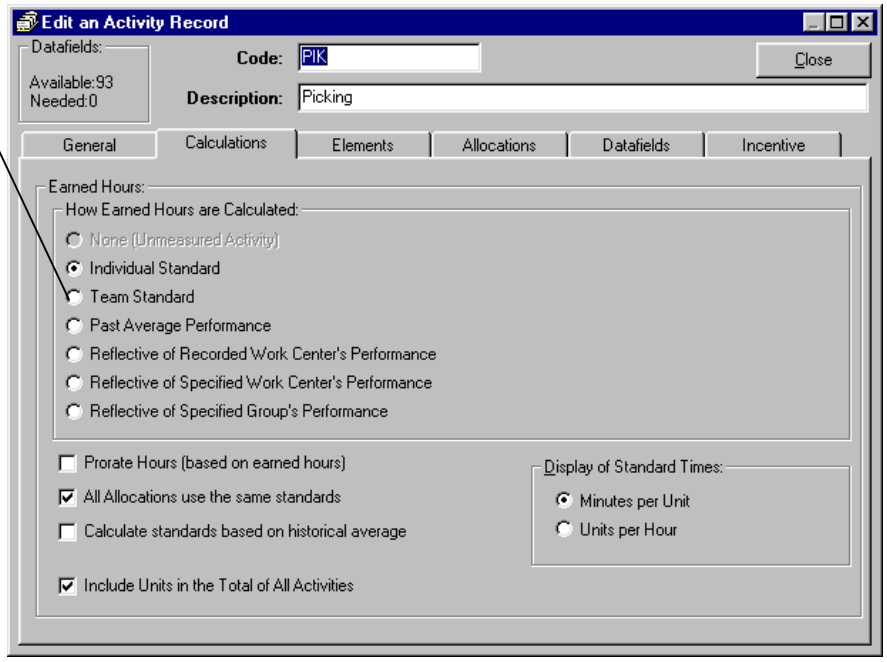
  For example, in receiving, there are eight unloaders. One unloader is assigned to each trailer. They unload bar code labeled cartons with the label side up onto a conveyor that carries them to one of two associates who scan each carton. It is easy to determine how many cartons each unloader and scanner handled. However, the associates who scan are at odds with the associates that unload. The unloaders can save 1.25 seconds per carton if they do not place the cartons on the conveyor label side up. The associate who scans must spend an additional 3.50 seconds to turn the carton . Unloaders can increase their

performance at the expense of the associates that are scanning. In this case it is best to make the entire receiving process a team activity.

To specify that an activity has a team standard, on the Calculations tab, in the How Earned Hours are Calculated section, click the radio button for Team.

On any given day, an associate can work on any number of team activities, in any number of work centers and on any number of teams within the work center. This means the makeup of a team working on an a team activity is dynamic. One minute a team could consist of five people and the next minute seven people.

To make this a team activity, click the team radio button.



In the day's production sheet file, time must be entered for each associate that worked on the team activity. For each team activity, the work center and an arbitrary team number between 1 and 99 are also entered. Units do not need to be entered on each associate's sheet. The units can be entered on one associate's production sheet, on several associate's production sheets or on a non existent virtual associate's sheet that does not have any time information. This last method is very common.

The total units entered on all sheets must equal the total number of units actually completed. Make sure that none of the units are double entered.

When the Daily Production Sheet Report is printed, the first step is to add up all of the team member's units for each team activity. Then, the total team's earned hours is calculated based on the standards for each team activity. Finally, the total earned hours for the team activity is divided among the team members in proportion to the actual time spent on the activity. If the team's overall performance for a team activity is 95%, each team member will have a 95% performance for that team activity.

In a day's production sheet file, the units for a team activity remain on the sheet of the team member on which they are entered. What was entered is what is listed on the Daily Production Sheet Report.

When the day's production sheet file is posted, the units are assigned to all of the members of the team. The units are divided among and written to the datafields in

each associate's account in the associate DataDiary in proportion to the actual time spent on the activity.

Paying Incentive based on the Associate's Past Performance

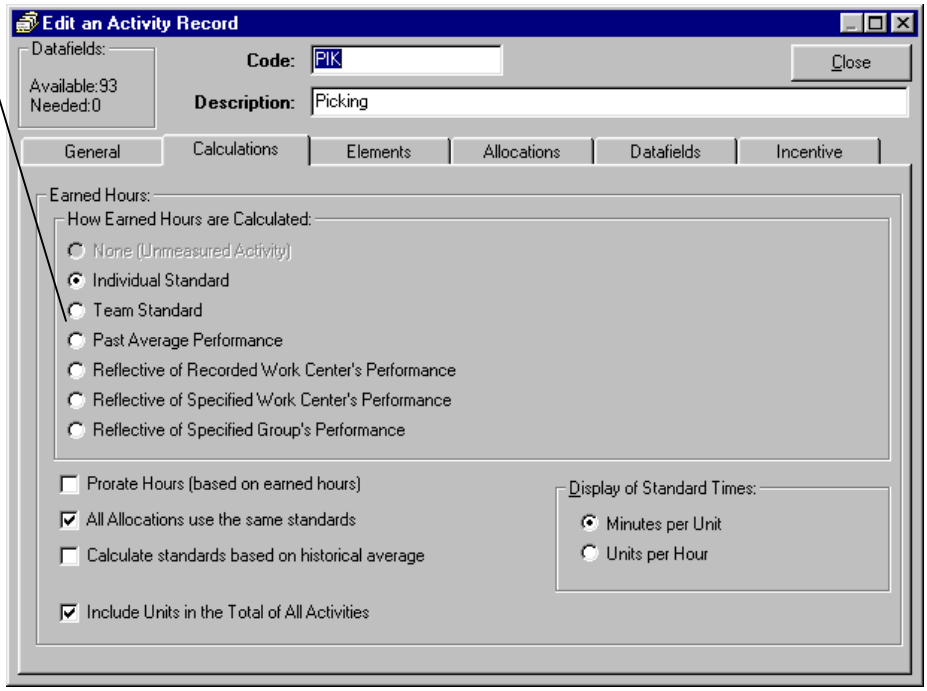
The only time an activity's earned hours calculation should be set to past average performance is when the incentive module is used.

If an associate who normally earns an incentive by working on activities with standards is assigned to an activity that does not have a standard, they can get earned hours for the activity in proportion to their normal performance. This type of activity is called a past average activity.

For example, an associate usually works on activities with standards such as picking and shipping. This associate is usually a high performer and regularly earns an incentive. Recently, several new hires have been added for peak season. The associate is asked to train the new hires. To keep this associate from suffering a loss in incentive pay, a training activity should be set up with the earned hours calculation set to past average.

To specify that earned hours for an activity are calculated at the associate's past average performance, on the Calculations tab, in the How Earned Hours are Calculated section, click the radio button for Past Average Performance.

To make the performance for this activity the same as the associate's past average performance, click the past average radio button.



Past average performance is based on the associate's short term average. The default value for the short term average is the past 6 weeks.

Calculating Performance for a Support Activity

If an associate is working on a support activity that does not have a standard, they can get earned hours for the activity that are based on the total performance of one or more work centers. This type of activity is called a reflective activity. This feature is usually only used with an incentive system.

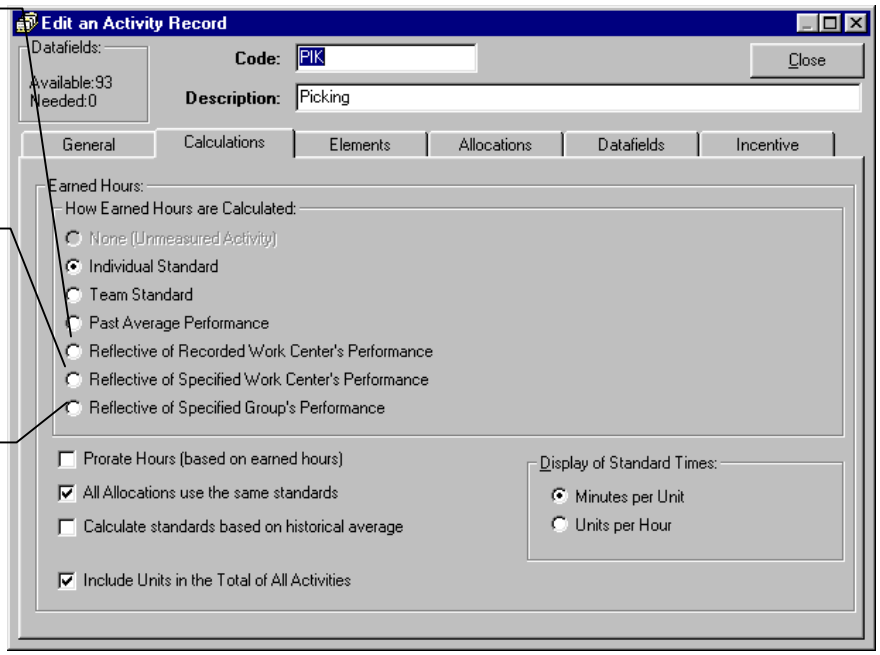
For example, an associate works primarily as a general material handler in a packing area. This job includes bringing supplies to the packing stations, distributing work to the packers and other miscellaneous tasks. It is not practical to set a standard for the job. However, performance of the job impacts the performance of the packers and overall productivity of the operation. Therefore, we would like pay the material handler an incentive when performance of the area is above the goal. This is done by specifying that the earned hours for the material handling activity is reflective of the work center. Therefore if the work center performs at 110%, the associate will receive earned hours based on a 110% performance for the time they spent on material handling.

To specify that earned hours for an activity are calculated based on the performance of a work center or group, on the Calculations tab, in the How Earned Hours are Calculated section, click a radio button for one of the three types of Reflective calculations.

Recorded Work Center: *Earned hours are calculated based on the performance of the work center in which the associate performs the reflective activity.*

Specified Work Center: *Earned hours are calculated based on the performance of a specific work center associated with the reflective activity.*

Specified Group: *Earned hours are calculated based on the performance of a specific group of work centers associated with the reflective activity*



If a specified work center or group is selected, a pull down list of work centers or groups is displayed from which a choice is made.

Automatically Prorating Measured Hours to an Activity

The total amount of time spent on activities can be entered into an associate's daily production sheet as a single number. The total hours are then prorated to each activity based on its percent of the total earned hours. Time can only be prorated to an activity when elapsed times are entered on production sheets and the activity's earned hours are calculated using an individual standard.

Prorating time should be avoided if at all possible. It is far less accurate than using specified elapsed or start/stop times.

To prorate time to an activity, on the Calculations tab, check the box next to Prorate Hours.

Using the Same Standard for All Allocations

For an activity, each allocation can have its own standard or all allocations can use the same standard. To specify that they use the same standard, on the Calculations tab, check the box next to All Allocations Use the Same Standard.

Automatically Calculating a Historical Standard

A standard can be either entered by the user or automatically set by ProRep based on the activity's historical average rate of production. This applies only to activities with individual or team standards.

Specified standards are also known as fixed standards or engineered standards. They can be established by engineering studies using time study, work sampling or the application of predetermined time systems such as MTM, MSD, Most, etc. They can also be goals, reasonable expectancies or rates used in determining budgets.

Historical standards are based on a user specified number of weeks of history. The default is the past 13 weeks of history. The historical standards are recalculated during the end of week processing.

To specify that an activity's standard is historical, on the Calculations tab, check the box next to Calculate Standards Based on Historical Averages.

Including this Activity's Units in the Total Units Produced

Some organizations calculate an overall units per hour that is used as a key indicator. This is usually calculated by taking the units for one, sometimes two or more processes and dividing it by the total of all hours. For example, the units picked per total hour, or the units received and shipped per total hour.

To specify that this activity's units are counted in the total units produced for all activities, on the Calculations tab, check the box to the left of Include Units in the total of all activities.

Selecting How Standard Times are Entered and Displayed

The element's standards can be entered and displayed as either minutes per unit or units per hour. Usually, if the activities have only one element with a standard, the standards are entered and displayed as units per hour. If some or most of the activities have multiple elements with standards, the standards are usually entered and displayed as minutes per unit.

Changing the method for displaying standards does not change the standards. The methods are mathematically equivalent. The method of display can be changed back and forth without any consequences.

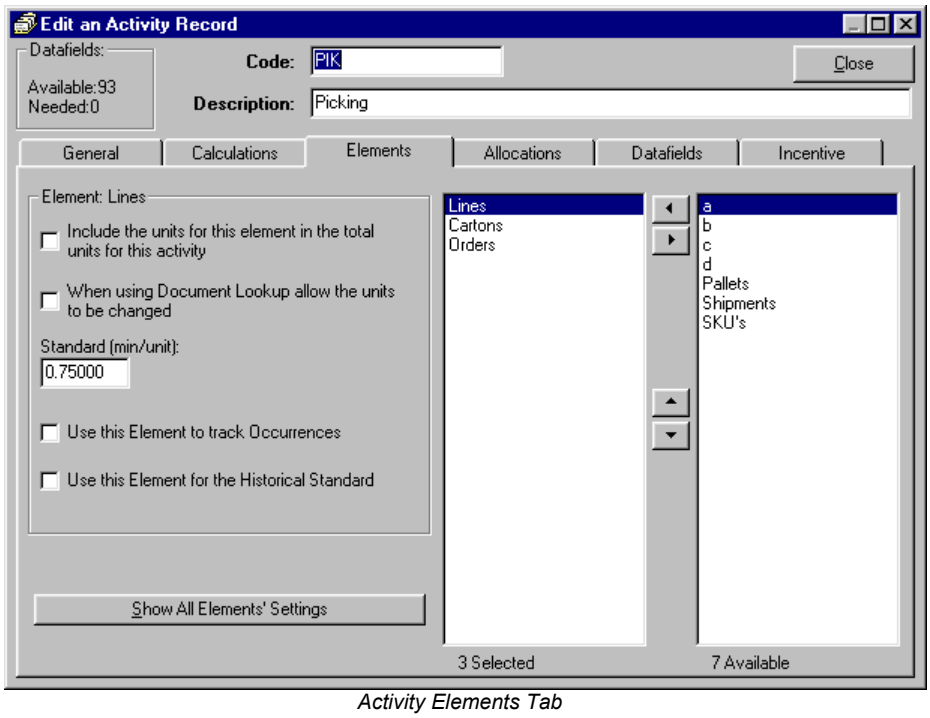
The following standards are the same:

2.000 Minutes Per Unit

30 Units Per Hour

To change the method of how the standards for elements are displayed, on the calculations tab, in the Display of Standard Times section, click the radio button for the desired display method. The standards for all elements for all activities are displayed with the selected method.

Clicking on the Element tab displays the following settings:



Activity Elements Tab

The right half of the Elements tab shows all elements and whether they are valid for this activity or not. The left half of the Elements tab shows the default standard and other settings for the element highlighted in the selected box.

Adding an Element to an Activity

On the right half of the Element tab are two boxes in which elements are listed. The rightmost box contains a list of the elements that are not on the activity and therefore available to be included on the activity. The box to the left contains a list of the elements that are selected as being on the activity.

To select an element to be on the activity, move it from the Available box to the Selected box.

When an element is added, a system-maintained datafield is created in the DataDiaries for the element. The name of the datafield is the activity description followed by a dash and the element description.

Deleting an Element from an Activity

Caution: Deleting an activity from an element changes the element's datafield in the DataDiaries from system-maintained to user-defined. ProRep looses all association between the element's datafield and the activity and element.

If the element is added back into the activity again, ProRep will not re-link the element to the old datafield. Instead, a new datafield will be created for the element. Unless the activity's or element's descriptions have been changed, the new datafield that is created will have the same name as the old datafield. In the window that lists all of the datafields, both datafields will be listed. The old datafield will be listed as user-defined. The new datafield will not be listed as user-defined. The element's old datafield can be deleted and it's data added into the element's new datafield.

To remove an element from an activity, on the Elements tab, move it from the Selected box to the Available box. The datafield that is associated with the element is not deleted from the DataDiaries. The datafield becomes user-defined and can be kept or deleted.

Specifying the Order in Which Elements are Listed

The order that elements are displayed during production entry and listed on daily production sheet reports is their order in the selected box. To change the order of an element, on the Elements tab, drag and drop the element.

If the lookup feature is used and element descriptions are not present in the lookup file, the units that are found are pre-filled into the first element in the selected box.

Specifying the Elements that are Included in the Activity Totals

If an activity has any elements, at least one of them should be selected as being included in the activity's total units produced. The units for the elements that are selected will appear on some pre-defined reports.

To include an element's units in the activity's total units produced, on the Elements tab, check the box next to Include the Units for this Element in the Total Units for the Activity.

Allowing Units from the Lookup File to be Changed

When the document lookup feature is used, the default is to not allow the units found for the element to be changed. If there is not a record for the element in the lookup file, the quantity for the element is pre-filled with a zero.

To allow the pre-filled quantity for the element to be changed, on the Elements tab, check the box next to When Using Document Lookup Allow the Units to be Changed.

Specifying the Element's Default Standard

The default standard has two purposes. If all allocations use the same standard, the default standard is used as the standard for all allocations. If each allocation has its own standard and a new allocation is added to the activity, the allocation's standard is pre-filled with the default.

To enter a default standard for an element, on the Elements tab, click the element in the Selected box and enter a standard in the Default Standard box.

Tracking the Number of Times an Activity is Performed

The number of times the activity is performed can be included in the DataDiaries. This feature can be used for any activity, including those that are not measured. This featured can also be used to calculate a fixed time per occurrence

For example, a data entry operator types in customer orders. On their production sheet, the associate lists one order on each line with the number of lines on the order. The number of orders that were entered can be tracked by specifying that the occurrences are included in the DataDiaries.

To use this element to track the occurrence, on the Elements tab, check the box next to Use this Element to Track Occurrences. When this activity is encountered on a production sheet, a quantity of one is automatically used as the quantity for this element.

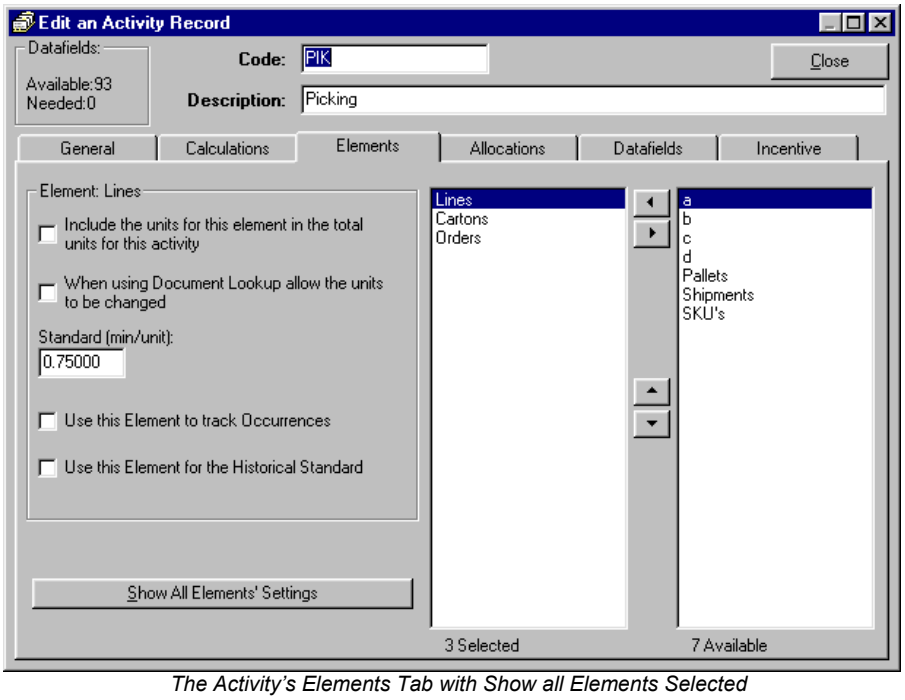
Selecting the Element Used for the Historical Standard

If the activity's standard is based on an historical average, one element must be selected as the one used as the basis. Since historical standards are based on only one element, selecting a different element deselects the previous element.

To select the element, on the Elements tab, click the Element in the Selected box and check the Use this Element for Historical Standard check box.

Displaying the Settings for all of the Elements

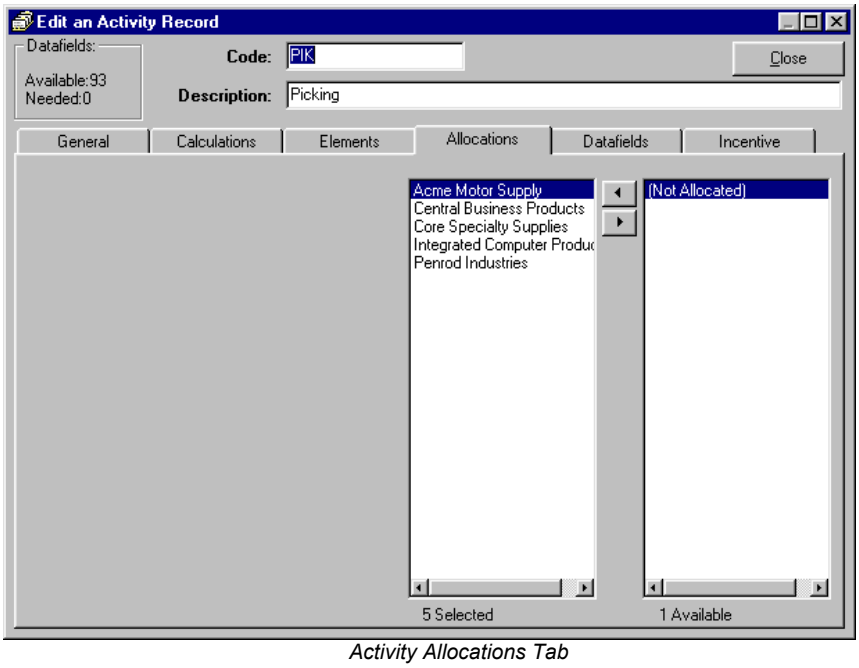
On the Elements tab, pressing the Show All Elements' Settings button changes the contents of the Elements tab as shown below:



The Activity's Elements Tab with Show all Elements Selected

The Elements tab now displays how each element has been set up. To return to the Element setup view, press the Return to Element Setup button.

Clicking on the Allocations tab displays the following settings:



Activity Allocations Tab

The right half of the Allocations tab shows all allocations and whether they are selected to be valid for this activity or not. The left half of the tab shows the

standards for the allocation's elements and other settings for the allocation highlighted in the selected box.

Adding an Allocation to an Activity

On the right half of the Allocation tab are two boxes in which allocations are listed. The rightmost box contains a list of the allocations that are not on the activity and therefore available to be included on the activity. The box to the left contains a list of the allocations that are selected as being on the activity. Production data can only be entered for allocations that appear in the Selected box.

To select an allocation to be on the activity, move it from the Available box to the Selected box.

Deleting an Allocation from an Activity

Deleting an allocation from an activity has no impact on any data in the allocation DataDiary. Deleting an allocation from an activity only prohibits production data from being entered for the allocation.

To remove an allocation from an activity, on the Allocation tab, move it from the Selected box to the Available box.

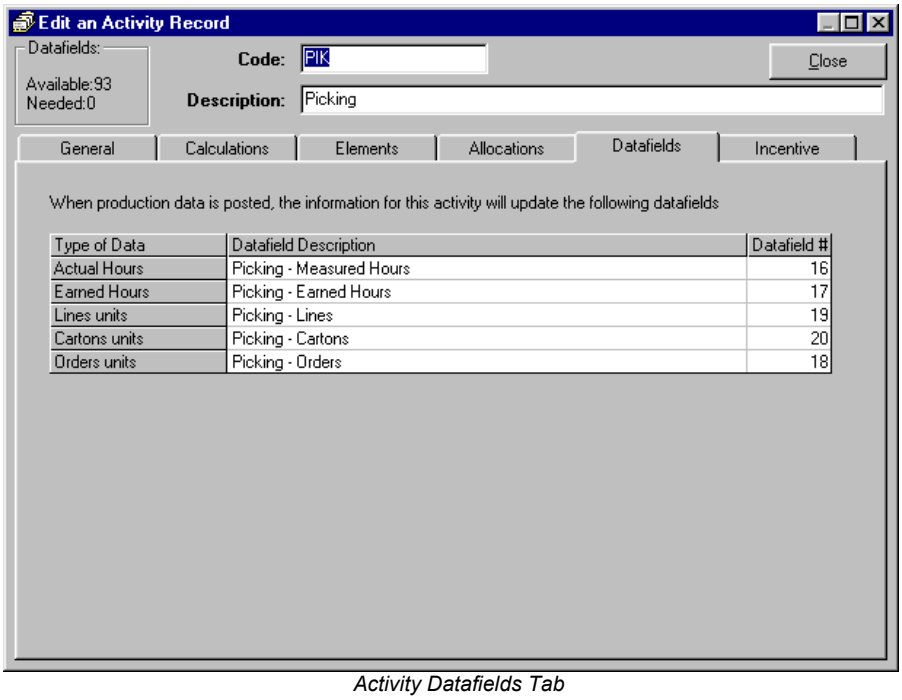
Specifying the Standards for an Allocation's Elements

When an allocation is added to an activity, the standards for the allocation's elements default to those displayed on the Elements tab. On the Calculations tab is a setting that controls whether all allocations have the same standards or not. If they do, the default standards for the elements are always used. If they do not, each allocation has its own set of standards for the elements.

To change the standards for an allocation's elements, on the Allocation tab, click on the allocation in the selected box and enter the standard in the Element Standard boxes on the left half of the tab.

Displaying the Activity's Datafields

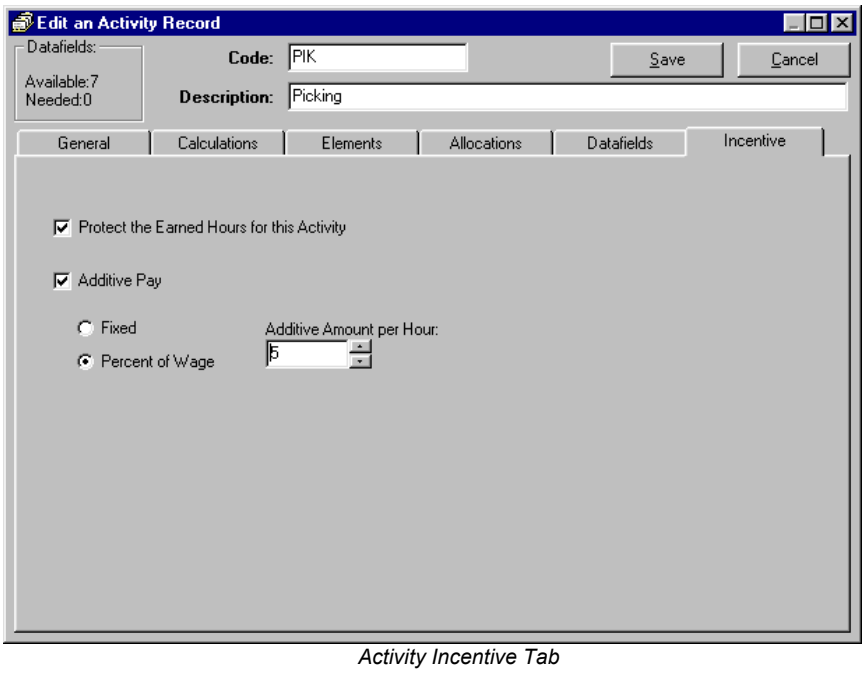
Clicking on the Activity's Datafields tab displays the following list.



Activity Datafields Tab

This is a list of the datafields in the work center, associate and allocation DataDiaries that hold the results of performing the activity. These datafields are automatically set up and system-maintained. The datafields can be used on user-defined reports and graphs.

Clicking on the incentive tab displays the following settings.



Activity Incentive Tab

Using the Greater of the Goal or Actual Performance for Incentive Pay

In some situations, an associate may be asked to perform an activity for which they have not been trained and have little experience. If the job requires a significant amount of training or experience to master, it might take a few weeks or months for the associate to perform this new activity at their prior rate of performance. Therefore, while learning this activity they would probably not earn a consistent incentive. In fact, the performance on the new task could negate good performance on other activities.

To solve this situation, a new activity, used only during training, can be set up for which the associate's performance is either the greater of the actual performance or the incentive performance goal. The result would be that if the associate performed above goal they would get incentive, but if they performed below goal it would have no negative impact on incentive that they might earn on other activities. To make this selection, check the box next to Protect the Earned Hours for this Activity.

Caution: This is a seldom used feature that should be used judiciously. There are alternative ways to prevent incentive pay from being negatively impacted. The earned hours calculation can be set to None or to Past Average Performance.

Paying an Additional Incentive that is not Based on Performance

In some situations, it is desirable to always pay an associate an extra amount for performing certain activities. For example, an experienced associate normally works on activities for which they do well and therefore earn incentive pay. A new associate is hired and the experienced associate is asked to train the new associate. During the time that they are training the new associate the experienced associate is working on the unmeasured activity of Trainer and therefore has no chance of earning incentive pay.

Obviously, the experienced associate might be reluctant to train new associates if it means loosing incentive pay. To solve this situation, the Trainer activity can be set up so that associates are paid an extra amount per hour for training other associates.

To pay an additional amount per hour while working on an activity, on the Incentive tab check the box next to Additive Pay. If the extra pay is a specific amount per hour, click the Fixed radio button and in the Additive Amount per Hour box enter the monetary amount. If the extra pay is to be a percent of the incentive pay rate, click the Percent of Wage radio button and in the Additive Amount per Hour box enter the percentage.

Deleting an Activity

An activity cannot be deleted if it is used on any daily production sheets that have not been posted. If an activity is not used on any production sheet and it is no longer needed, you have three choices:

- Keep the activity and its data in the DataDiaries.

To prevent someone from actually using the activity, change its code to something unusual. For example, if the activity of Emergency Order Filling is no longer needed, change its code from EO to ZZEO.

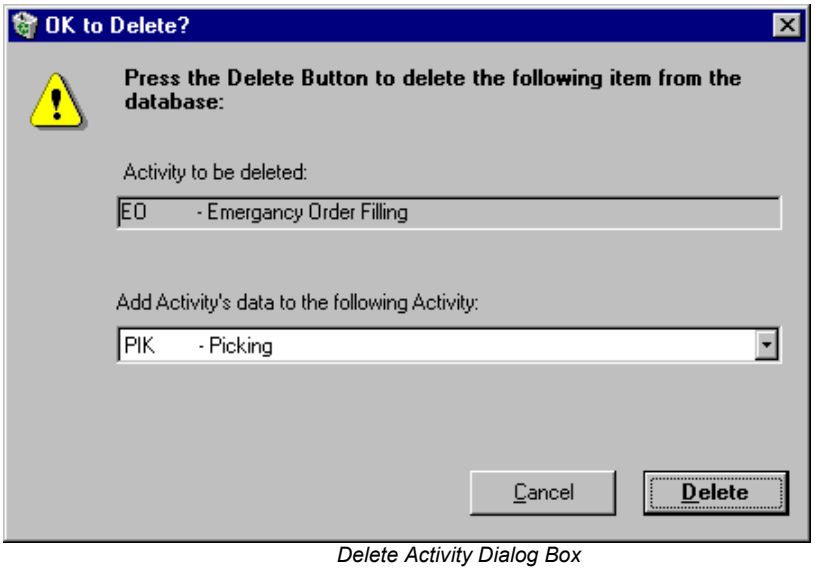
- Delete the activity and merge its data into another activity's datafields.

All of the data in the datafields that hold hours information will be summed into the target activity's datafields. The data in the datafields that hold element information will be summed into the target activity's element datafields only if the element is active on the target activity. If an element is not active on the target activity, the element datafield will remain in the DataDiaries as a user-defined datafield.

- Delete the activity and its data from the DataDiaries.

  All of the data in the datafields that hold hours information will be summed into datafields that hold hours information for deleted activities. The element datafields will remain in the DataDiaries as a user-defined datafields.

To delete an activity, from the window that lists the activities, click on the activity and click the Delete button. The delete activity dialog box is displayed.


OK to Delete?
Press the Delete Button to delete the following item from the database:
Activity to be deleted:
EO - Emergency Order Filling
Add Activity's data to the following Activity:
PIK - Picking
Cancel
Delete

Delete Activity Dialog Box

If the activity's data is to be summed into another activity, select the activity from the pull down list. To actually delete the activity, click the delete button.

Chapter 8: Daily Procedures

The following steps need to be done for each work day:

- Create Daily Files. This creates the production sheet file and the optional quality sheet file.
- Enter or Import Data Into Production Sheets.
- Enter Data Into Quality Sheets, if the feature is implemented.
- Print Daily Production and Quality Reports.
- Correct Production and Quality data and re-print reports, as needed.
- Supervisor or manger approval of Production Sheets for Posting. This is optional but recommended.
- Post Daily Files.

Understanding the Active Week Concept

Active Week is the first week of a two week window for which daily files can be created. Daily files can be created for any day in this two week window. However, only daily files for days in the active week can be posted. After all days in the active week are posted, week end processing is run. This sets the active week to the next week.

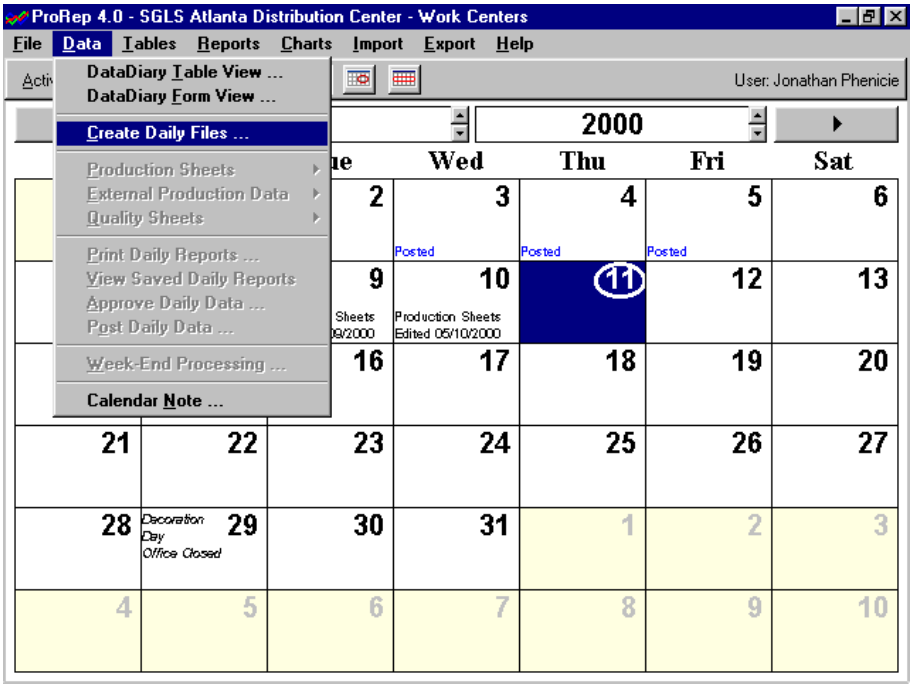
When a new ProRep system is created, the active week defaults to the week that contains the PC's current date setting. As long as no daily files are created, the active week continues to automatically change to the current week. The first time that the daily files are created, the active week is specifically set to the current week and no longer automatically changes.

To determine the active week, click the Active Week button on the toolbar. This will change the ProRep desktop calendar to highlight the first day in the active week.

If the active week needs to be changed and daily files have never been created, select Files, Settings, Current System, Active Week. If the active week needs to be changed and daily files have already been created, call Spalding Software for instructions.

Creating Daily Files

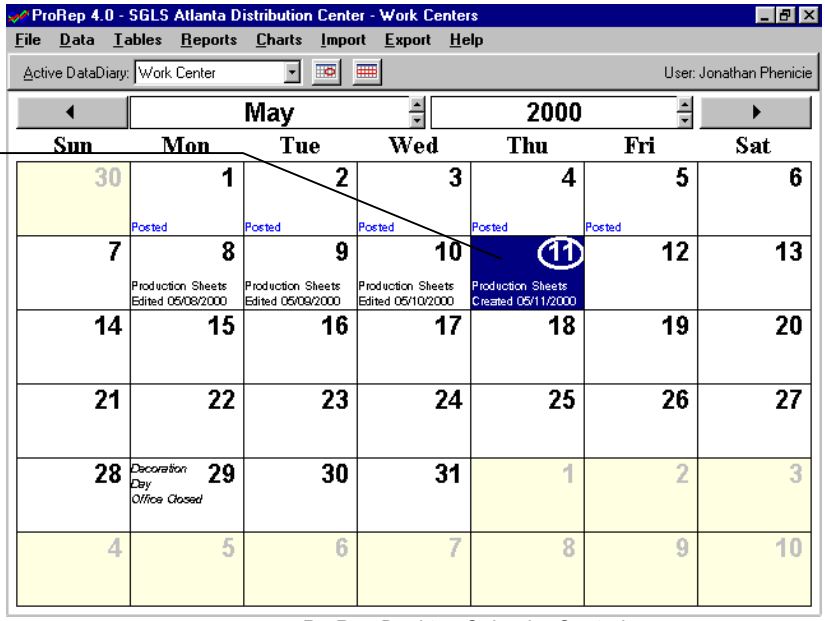
ProRep must be prepared to receive the day's data. This is done by creating the daily files. Daily files can only be created in the current active week or the following week. To create daily files highlight the desired day, click Data on the menu bar, then Create Daily Files.



Create Daily Files Menu Selection.

After the daily files are created the desktop calendar is re-displayed.

After daily files have been created, the calendar shows the current status of the day's production sheet file.


ProRep 4.0 - SGLS Atlanta Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
User: Jonathan Phenicie
May
2000
Sun Mon Tue Wed Thu Fri Sat
Posted
Production Sheets Edited 05/08/2000
Production Sheets Edited 05/09/2000
Production Sheets Edited 05/10/2000
Production Sheets Created 05/11/2000
Decoration Day Office Closed

ProRep Desktop Calendar Control

Daily files include a production sheet file. If the quality measurement feature is being used, a quality sheet file is also created.

Correcting the Daily Files' Date

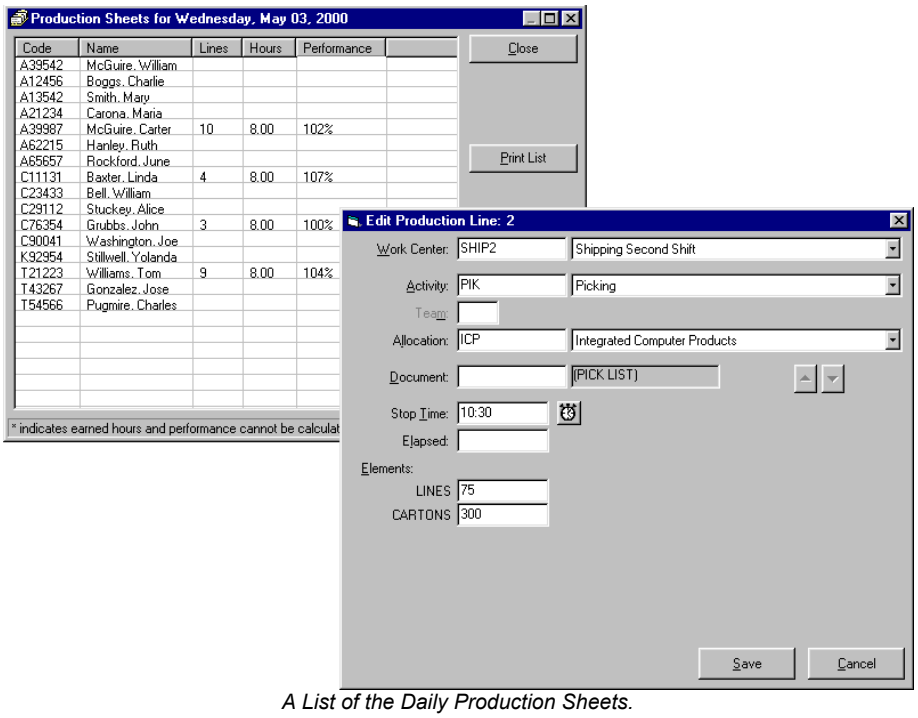
If the date needs to be changed highlight the day select File, Maintenance, Daily Files, Change Date, and click on the correct date.

Deleting Daily Files Without Posting

If daily files have been created in error, they can be deleted. Simply highlight the day to be deleted, select File, Maintenance, Daily Files, Delete.

Entering or Importing Data Into Production Sheets

After the daily files have been created, data is entered into the day's production sheets. The data can be entered directly into ProRep or imported from another computer system.



A List of the Daily Production Sheets.

There are two methods for entering data directly into a ProRep production sheet file. One method is to have associates fill out paper production sheets and have someone at a central location key in the data from the sheets. The other method is to have each associate at the completion of each activity enter their own data directly into a PC on a LAN by either typing or scanning bar codes.

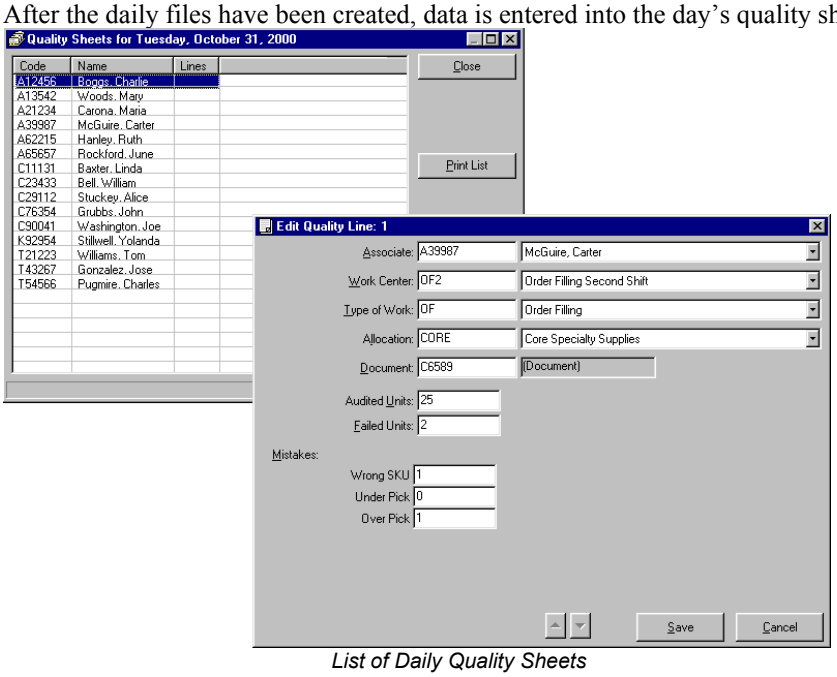
Data can be imported into a production sheet file from many different types of computer systems. For example, a warehouse management system (WMS) or a pick-to-light system can supply data about each task that was performed. A time and

attendance system can supply data about each associate's clock-in, clock-out and lunch-time.

For more information see Chapter 10: Entering Production data directly into ProRep and Chapter 11: Acquiring Production Data from Other Computer Systems.

Entering Data into Quality Sheets

After the daily files have been created, data is entered into the day's quality sheets.



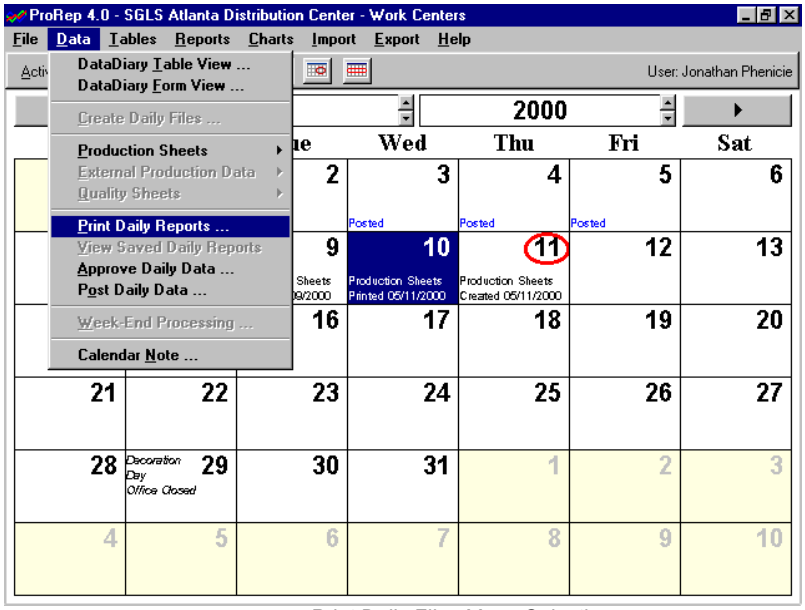
List of Daily Quality Sheets

Data is generally entered from an auditor's quality sheet, either by a clerk, or the auditor. See Chapter 10 for more information.

Printing Daily Reports

Daily reports can be printed as often as desired. It is very important to be aware that every printing of a day's reports updates the day's data in the Work Center DataDiary. The Associate and Allocation DataDiaries are not updated When the reports are printed. They are only updated when the day is posted.

To print a daily report, highlight the desired day, select Data, and then Print Daily Reports.



Print Daily Files Menu Selection

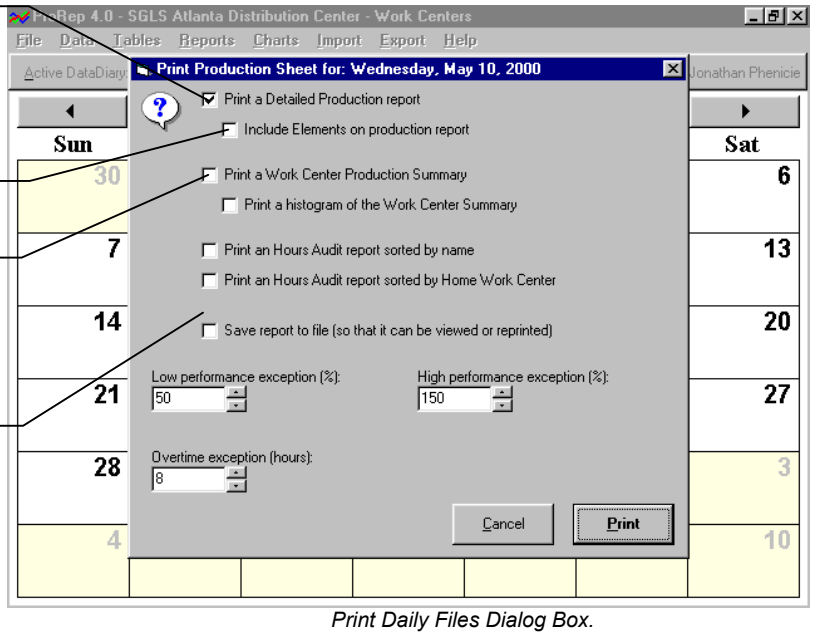
A dialog box is displayed that allows selection of the specific types of reports to be printed.

Print a Detailed Production Report that includes all activities performed by the associate.

Include each activities Elements.

A work center production summary prints one summary line for each associate

Prints the report to a PDF file that anyone can view or print using the Adobe Acrobat Reader provided with ProRep.

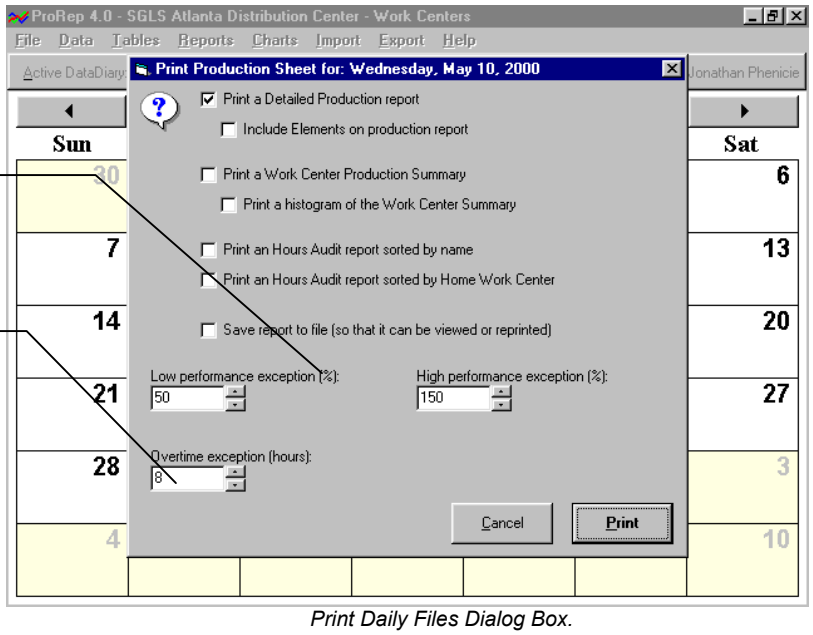

Print Production Sheet for: Wednesday, May 10, 2000
Print a Detailed Production report
Include Elements on production report
Print a Work Center Production Summary
Print a histogram of the Work Center Summary
Print an Hours Audit report sorted by name
Print an Hours Audit report sorted by Home Work Center
Save report to file (so that it can be viewed or reprinted)
Low performance exception (%):
50
High performance exception (%):
150
Overtime exception (hours):
8
Cancel
Print
Sun
Sat

Print Daily Files Dialog Box.

The specific reports that are printed depend on the boxes that are checked.

Percentage limit of exceptional or low performance are set here.

The number of hours after which an associate will be listed on the over time exception report.


ProRep 4.0 - SGLS Atlanta Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary
Print Production Sheet for: Wednesday, May 10, 2000
Jonathan Phenicie
Print a Detailed Production report
Include Elements on production report
Print a Work Center Production Summary
Print a histogram of the Work Center Summary
Print an Hours Audit report sorted by name
Print an Hours Audit report sorted by Home Work Center
Save report to file (so that it can be viewed or reprinted)
Low performance exception (%):
50
High performance exception (%):
150
Overtime exception (hours):
8
Cancel
Print
Sun
Sat

Print Daily Files Dialog Box.

Following are examples of the reports generated when daily reports are printed.

SSI Southeastern Distribution Center

Detailed Production Sheet Report

Work Center: RCV - Receiving — **Monday, September 25, 2000**

Associate	Associate Code	Activity Code	Team	Allocation Code	Document	Activity Element		Units	Stop Time	Actual Hours	Earned Hours	Perf.
Washington, Joe	C90041	@CLOCKIN				Clock-In			07:30			
		RCON	2			Receive Consolidated		0	09:25	1.92	1.72	90%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	11:15	1.58	1.39	88%
		@LUNCH				Lunch				0.50		
		RCC	2			Receive Common Carrier		0	01:00	1.25	1.37	110%
		RCC	1			Receive Common Carrier		0	01:40	0.67	0.58	88%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	03:40	1.75	1.53	88%
		PUT		PI		Put Away		7	04:00	0.33	0.31	94%
						Pallets	7					
										8.00	6.91	92%
Williams, Tom	T21223	RCC	2			Receive Common Carrier		0	02:30	1.50	1.65	110%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	03:50	1.08	0.95	88%
		PUT		ICP		Put Away		15	04:30	0.67	0.67	100%
						Pallets	15					
										3.50	3.27	101%
Woods, Mary	A13542	@CLOCKIN				Clock-In			07:30			
		RCON	2			Receive Consolidated		0	09:30	2.00	1.79	90%
		BREAK				Break				0.25		
		@LUNCH				Lunch				0.50		
		RCC	1			Receive Common Carrier		0	12:15	2.00	1.75	88%
		RCON	2			Receive Consolidated		0	01:45	1.50	1.34	90%
		BREAK				Break				0.25		
		PUT		CORE		Put Away		24	03:15	1.25	1.07	86%
						Pallets	24					
		RCON	2			Receive Consolidated		0	03:45	0.50	0.45	90%
		CLEAN				Cleanup			04:00	0.25		
		RCC	1	ACME		Receive Common Carrier		326	04:00	0.00	0.00	0%
						Shipments	5					
						Cartons	326					
		RCC	2	CBP		Receive Common Carrier		497	04:00	0.00	0.00	0%
						Shipments	6					
						Cartons	497					
		RCC	1	CORE		Receive Common Carrier		215	04:00	0.00	0.00	0%

ProRep - printed by ADMINSTRATOR on Acrobat PDFWriter — Page: 1 — Printed: 6/21/00 10:38

Detailed Production Report with Elements Included.

SSI Southeastern Distribution Center

Production Summary Report

Work Center: OF1 - Order Filling First Shift

Monday, September 25, 2000

		Performance				Actual Hours			Effectiveness			
Code	Name	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks	Total of All Work Centers
C11131	Baxter, Linda	86%	94%	91%	6.08	7.08	0.92	8.00	76%	81%	77%	8.00
A12456	Boggs, Charlie	94%	106%	104%	6.79	7.25	0.75	8.00	85%	97%	91%	8.00
C76354	Grubbs, John	94%	77%	78%	0.75	0.80	7.20	8.00	9%	66%	66%	8.00
T54566	Pugmire, Charles	85%	110%	104%	1.70	2.00	0.25	2.25	76%	94%	90%	8.00
A65657	Rockford, June	89%	95%	97%	5.09	5.75	2.25	8.00	64%	87%	88%	8.00
OF1	Order Filling First Shift	89%	95%	96%	20.42	22.88	11.37	34.25	60%	78%	81%	

Production Summary Report for a Work Center.

SSI Southeastern Distribution Center

Production Summary Report

Total of All Work Centers

Monday, September 25, 2000

		Performance				Actual Hours			Effectiveness			
Code	Name	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks	
RCV	Receiving	92%	96%	95%	16.59	18.00	1.50	19.50	85%	89%	87%	
OF1	Order Filling First Shift	89%	95%	96%	20.42	22.88	11.37	34.25	60%	78%	81%	
OF2	Order Filling Second Shift	90%	100%	100%	7.06	7.83	1.42	9.25	76%	89%	88%	
SHIP1	Shipping First Shift	83%	90%	89%	11.72	14.08	1.42	15.50	76%	82%	82%	
SHIP2	Shipping Second Shift	91%	101%	100%	5.36	5.92	0.83	6.75	79%	93%	92%	
CSA	Customer Service & Admin.	93%	95%	94%	9.11	9.75	6.25	16.00	57%	86%	86%	
TotalofAll	Total of All Work Centers	90%	97%	96%	70.25	78.47	22.78	101.25	69%	87%	87%	

Production Summary Report for All Work Center.

SSI Southeastern Distribution Center

Associate Performance Report

All Associates

Last 6 Weeks

From	To	Number of Associates	%	Cum. %	Histogram
0%	9%	0	0%	0%	
10%	19%	0	0%	0%	
20%	29%	0	0%	0%	
30%	39%	0	0%	0%	
40%	49%	0	0%	0%	
50%	59%	0	0%	0%	
60%	69%	0	0%	0%	
70%	79%	1	7%	7%	**********
80%	89%	2	13%	20%	**********
90%	99%	8	53%	73%	**********
100%	109%	2	13%	87%	**********
110%	119%	2	13%	100%	**********
120%	129%	0	0%	100%	
130%	139%	0	0%	100%	
140%	149%	0	0%	100%	
150%	159%	0	0%	100%	
160%	169%	0	0%	100%	
170%	179%	0	0%	100%	
180%	189%	0	0%	100%	
190%	199%	0	0%	100%	

Last 52 Weeks

From	To	Number of Associates	%	Cum. %	Histogram
0%	9%	0	0%	0%	
10%	19%	0	0%	0%	
20%	29%	0	0%	0%	
30%	39%	0	0%	0%	
40%	49%	0	0%	0%	
50%	59%	0	0%	0%	
60%	69%	0	0%	0%	
70%	79%	1	7%	7%	**********
80%	89%	2	13%	20%	**********
90%	99%	7	47%	67%	**********
100%	109%	4	27%	93%	**********
110%	119%	1	7%	100%	**********
120%	129%	0	0%	100%	
130%	139%	0	0%	100%	
140%	149%	0	0%	100%	
150%	159%	0	0%	100%	
160%	169%	0	0%	100%	
170%	179%	0	0%	100%	
180%	189%	0	0%	100%	
190%	199%	0	0%	100%	

Histogram of Associate Performances.

SSI Southeastern Distribution Center

Hours Audit Report

All Associates sorted by name

Monday, September 25, 2000

			Performance				Actual Hours			Effectiveness		
Code	Name	Work Center	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks
C11131	Baxter, Linda	Order Filling First Shift	86%	94%	91%	6.08	7.08	0.92	8.00	76%	81%	77%
C23433	Bell, William	Customer Service & Admin.	91%	88%	88%	4.87	5.33	2.67	8.00	61%	70%	73%
A12456	Boggs, Charlie	Order Filling First Shift	94%	106%	104%	6.79	7.25	0.75	8.00	85%	97%	91%
A21234	Carona, Maria	Customer Service & Admin.	96%	93%	97%	4.24	4.42	3.58	8.00	53%	85%	89%
C76354	Grubbs, John	Order Filling First Shift	94%	77%	78%	0.75	0.80	7.20	8.00	9%	66%	66%
A62215	Hanley, Ruth	Shipping First Shift	84%	90%	92%	4.21	5.00	0.25	5.25	80%	81%	84%
A39987	McGuire, Carter	Order Filling Second Shift	100%	91%	88%	3.01	3.00	0.75	3.75	80%	78%	76%
		Shipping Second Shift	102%	91%	88%	3.73	3.67	0.58	4.25	88%	78%	76%
		TOTAL	101%	91%	88%	6.74	6.67	1.33	8.00	84%	78%	76%
T54566	Pugmire, Charles	Order Filling First Shift	85%	110%	104%	1.70	2.00	0.25	2.25	76%	94%	90%
		Shipping First Shift	76%	110%	104%	3.66	4.83	0.92	5.75	64%	94%	90%
		TOTAL	79%	110%	104%	5.37	6.83	1.17	8.00	67%	94%	90%
A65657	Rockford, June	Order Filling First Shift	89%	95%	97%	5.09	5.75	2.25	8.00	64%	87%	88%
C29112	Stuckey, Alice	Order Filling Second Shift	84%	105%	108%	4.05	4.83	0.67	5.50	74%	87%	92%
		Shipping Second Shift	73%	105%	108%	1.63	2.25	0.25	2.50	65%	87%	92%
		TOTAL	80%	105%	108%	5.68	7.08	0.92	8.00	71%	87%	92%
C90041	Washington, Joe	Receiving	92%	91%	91%	6.91	7.50	0.50	8.00	86%	73%	72%
T21223	Williams, Tom	Receiving	101%	110%	112%	3.27	3.25	0.25	3.50	93%	99%	102%
		Shipping First Shift	91%	110%	112%	3.85	4.25	0.25	4.50	86%	99%	102%
		TOTAL	95%	110%	112%	7.12	7.50	0.50	8.00	89%	99%	102%
A13542	Woods, Mary	Receiving	88%	96%	95%	6.41	7.25	0.75	8.00	80%	85%	83%

The following associates did not have any production information for any work centers:

Code	Name	Home Work Center
T43267	Gonzalez, Jose	Order Filling Second Shift
K92954	Stillwell, Yolanda	Shipping Second Shift

ProRep - printed by ADMINSTRATOR on Acrobat PDFWriter Page: 29 Printed: 6/21/00 10:38

Hours Audit Report.

After the reports are printed they should be reviewed by the supervisors. Corrections should be made as necessary. The reports can be printed as often as needed.

Approving Daily Files for Posting

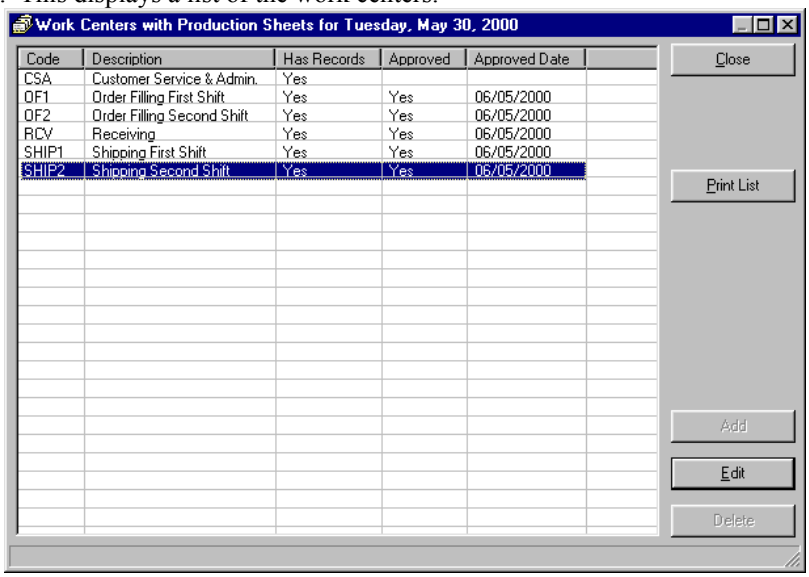
Use of the daily data approval feature is optional. However, to avoid posting bad data, the approval feature should be used.

After the daily reports are printed and corrected, the daily files should be approved for posting. Each work center's data is approved separately. A work center's data can be approved either directly by the work center's supervisor, or indirectly by a central ProRep associate at the request of the supervisor.

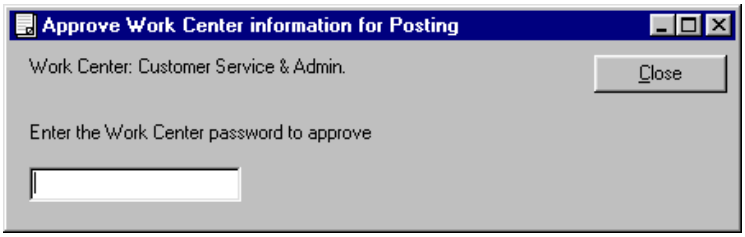
If supervisors are to approve their own work center's data, an approval password should be added to the work center's record. The entry of this password will be required during the approval process for the work center's data.

If a central ProRep associate is to approve the daily data for the work center's supervisor, no approval password should be entered into the work center's record. The entry of a password will not be required during the approval process for the work center's data.

To approve daily files for posting, highlight the day, select Data, Approve Daily Data. This displays a list of the work centers.



The status of each work center's production sheets is displayed. To approve a work center's daily files, highlight the work center and click the Edit button. If the work center has an approval password the password dialog is displayed.


Approve Work Center information for Posting
Work Center: Customer Service & Admin.
Close
Enter the Work Center password to approve

If there is no approval password in the work center's record this dialog is not displayed. After entering the password, click the Save button to confirm.

To un-approve a work center's daily files, highlight the approved work center, click the edit Button and confirm that the files are to be un-approved.

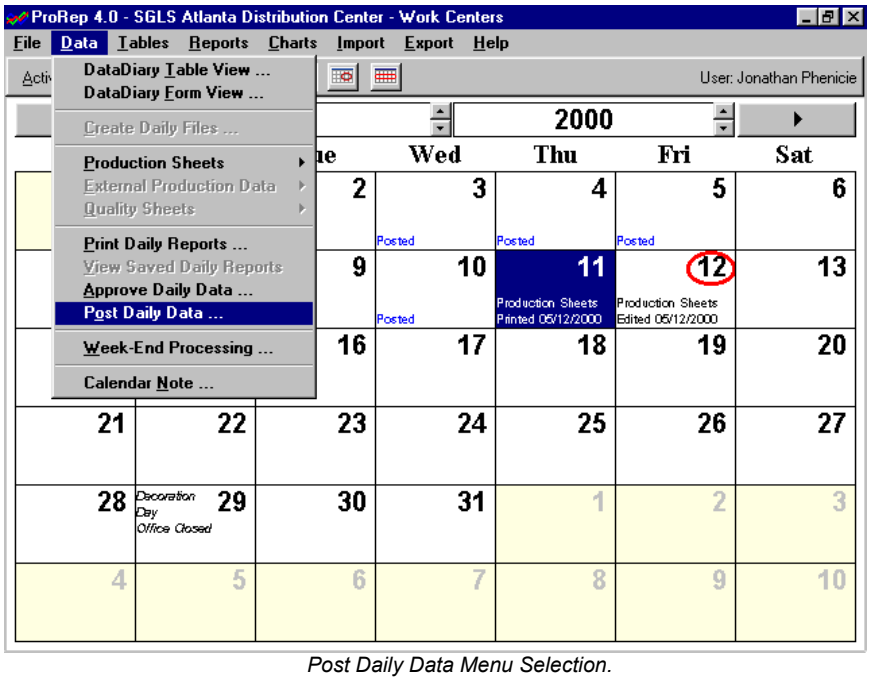
Posting Daily Files

After all corrections are made, the daily files should be posted. It is very important that the daily files are not posted until all associates data has been entered and corrected. It is much more difficult to correct data after it is posted.

It is also very important to be aware that posting the daily files updates the day's data in all three of the DataDiaries; the Work Center DataDiary, the Associate DataDiary and the Allocation DataDiary.

Daily files can only be posted that are in the active week. Daily files must also be posted in chronological order. For example, if we want to post May 23rd, there cannot be any un-posted daily files dated May 22nd or before.

To post the data highlight the desired day, select Data, and Post Daily Data.

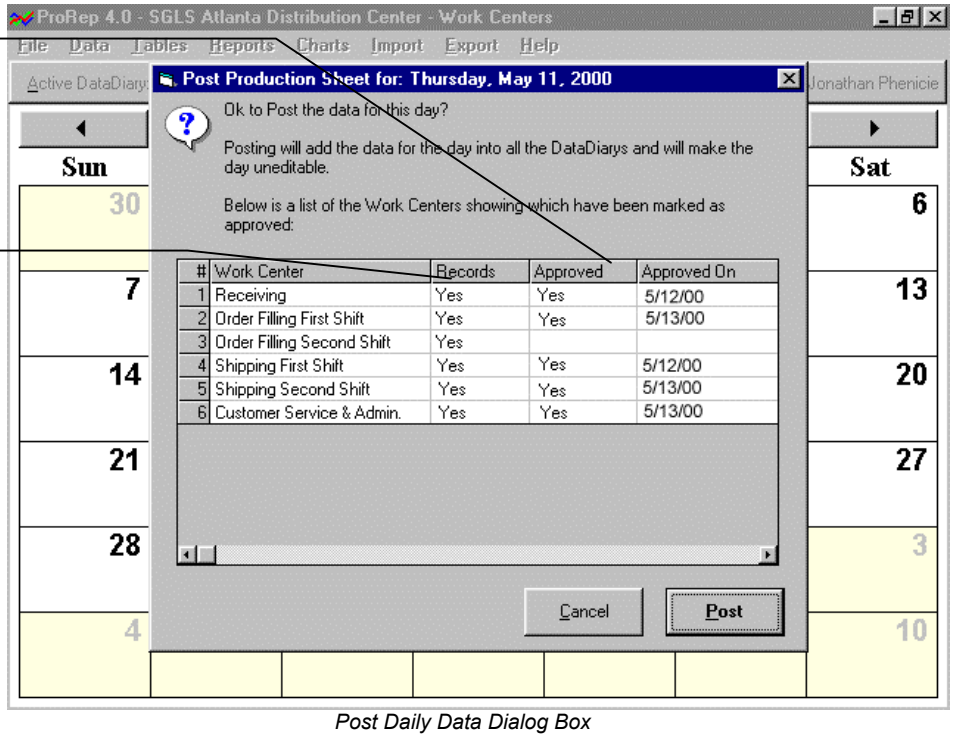


Post Daily Data Menu Selection.

The following window is displayed

If the approval feature is being used a Yes will be displayed for approved work center data.

The work centers with data will have Yes in the records column.

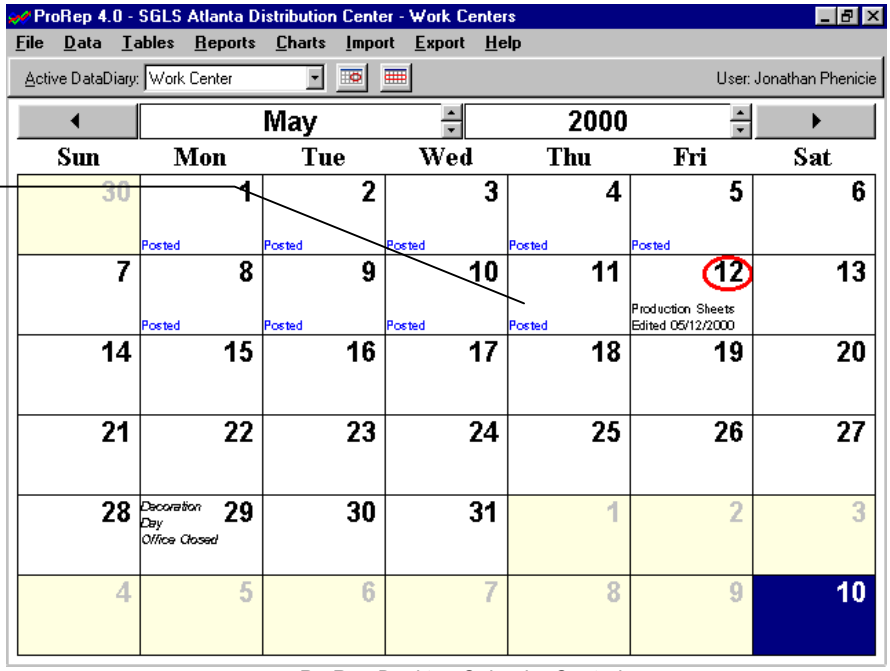

ProRep 4.0 - SGLS Atlanta Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Post Production Sheet for: Thursday, May 11, 2000
Ok to Post the data for this day?
Posting will add the data for the day into all the DataDiarys and will make the day uneditable.
Below is a list of the Work Centers showing which have been marked as approved:
Work Center Records Approved Approved On
1 Receiving Yes Yes 5/12/00
2 Order Filling First Shift Yes Yes 5/13/00
3 Order Filling Second Shift Yes
4 Shipping First Shift Yes Yes 5/12/00
5 Shipping Second Shift Yes Yes 5/13/00
6 Customer Service & Admin. Yes Yes 5/13/00
Cancel
Post
Sun
Sat

Post Daily Data Dialog Box

The approval status of each work center's production sheets is displayed. The daily files can be posted even if one or more work centers have not been approved by a supervisor. To post the daily files, click the Post button.

A detailed final report is produced as a PDF file when the day is posted. This file is stored for six weeks. The report is identical to the report generated by printing daily files described earlier in the chapter. After a day is posted it can not be printed except by using the PDF file created when posting.

After a day is posted, the text on the calendar for that day displays Posted.

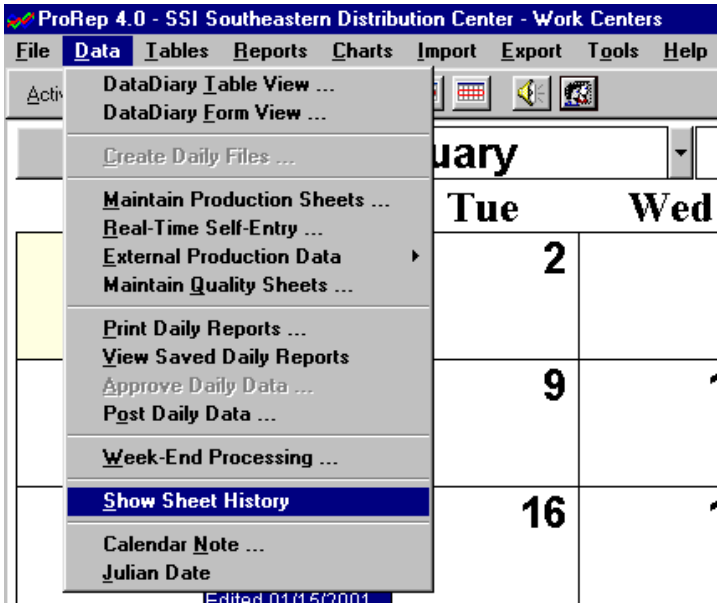

ProRep 4.0 - SGLS Atlanta Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
User: Jonathan Phenicie
May
2000
Sun Mon Tue Wed Thu Fri Sat
Posted
Production Sheets Edited 05/12/2000
Decoration Day Office Closed

ProRep Desktop Calendar Control.

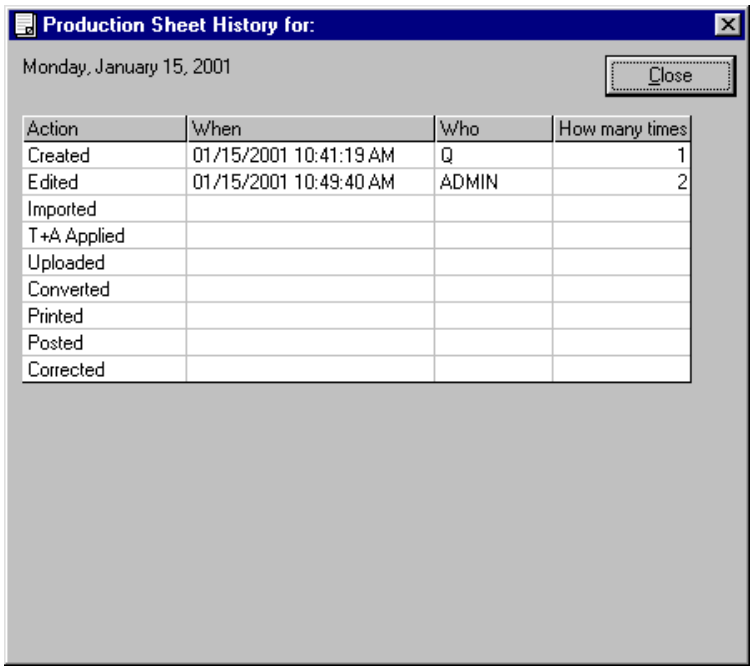
After all of the days in the week are posted, week-end processing should be performed.

Showing Production Sheet History

Production sheet history is a summary of all production sheet data entered for a day. Highlight the desired day, select Data, Show Sheet History.



A list of the important details of the production sheets is displayed.



Statistics of the actions performed upon the production sheet.

Correcting Posted Data

Once data has been posted it should NEVER have to be changed.

Correcting posted data is possible but should be avoided. It is a time consuming, difficult, and threatens data integrity. The following list gives pointers to avoid the need to change posted data.

- Do not post immediately after printing. Allow enough time for supervisors to review the reports.
- Print daily reports before posting. If any changes are made to the production sheets reprint the production sheets. A final proofing of the production sheets can save a lot of time in the future.
- Use the production sheet approval process. Do not post until all sheets for all work centers have been approved by the supervisors.

To correct posted data highlight the day, select File, Maintenance, Daily Files, Correct Posted Data.

Chapter 9: Weekly Procedures

After all the days in the active week are posted, the end of week processing should be run, and a backup of ProRep's data should be made.

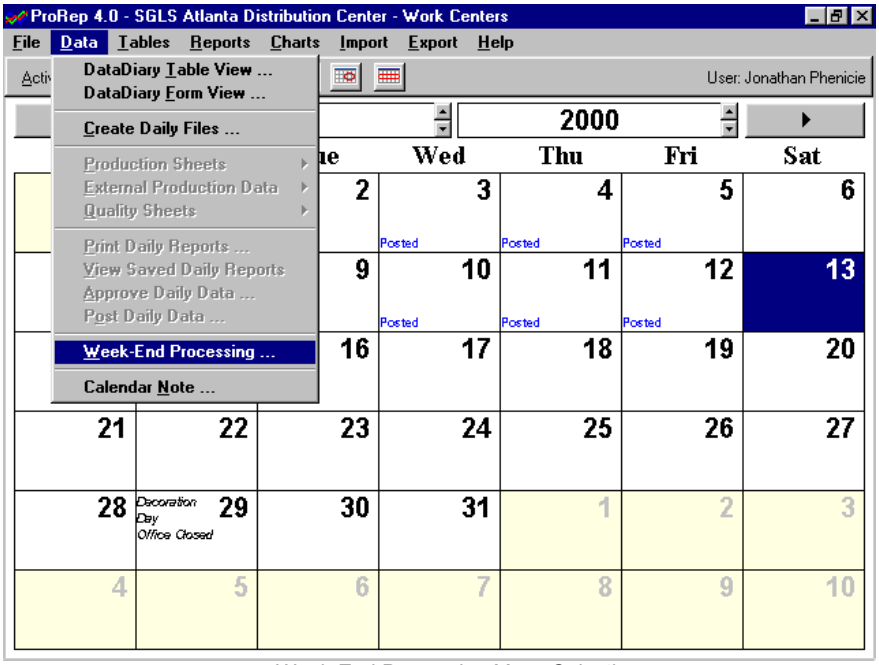
End of Week Processing

All Daily files for the week must be posted before performing end of week processing. After week-end processing is completed no new daily files may be created for that week.

End of week processing performs the following tasks:

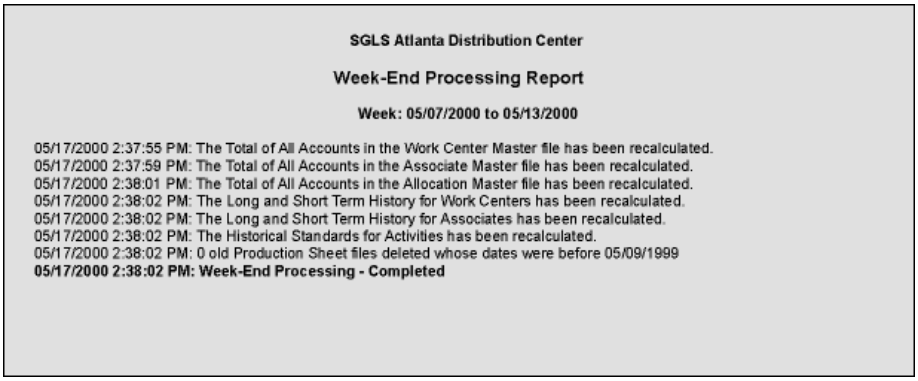
- Recalculates the long and short term history for Work Centers.
- Recalculates the long and short term history for Associates.
- For Activities that use historical standards, they are recalculated.
- Deletes the oldest production sheets in the system's long term history.
- Sets the next week as the active week.

To perform end of week processing, highlight any day in the week, select Data, then Week-End Processing.



Week-End Processing Menu Selection.

When the week-end processing is complete a report will be printed. This report is conformation that week-end processing has completed without errors.



SGLS Atlanta Distribution Center

Week-End Processing Report

Week: 05/07/2000 to 05/13/2000

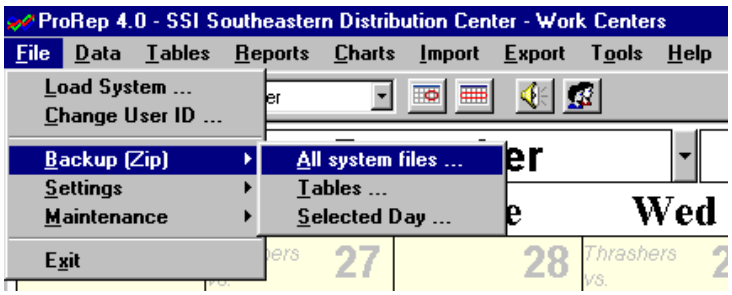
05/17/2000 2:37:55 PM: The Total of All Accounts in the Work Center Master file has been recalculated.
05/17/2000 2:37:59 PM: The Total of All Accounts in the Associate Master file has been recalculated.
05/17/2000 2:38:01 PM: The Total of All Accounts in the Allocation Master file has been recalculated.
05/17/2000 2:38:02 PM: The Long and Short Term History for Work Centers has been recalculated.
05/17/2000 2:38:02 PM: The Long and Short Term History for Associates has been recalculated.
05/17/2000 2:38:02 PM: The Historical Standards for Activities has been recalculated.
05/17/2000 2:38:02 PM: 0 old Production Sheet files deleted whose dates were before 05/09/1999
05/17/2000 2:38:02 PM: Week-End Processing - Completed

Week-End Processing Report

After week-end processing is complete, the next week becomes the active week.

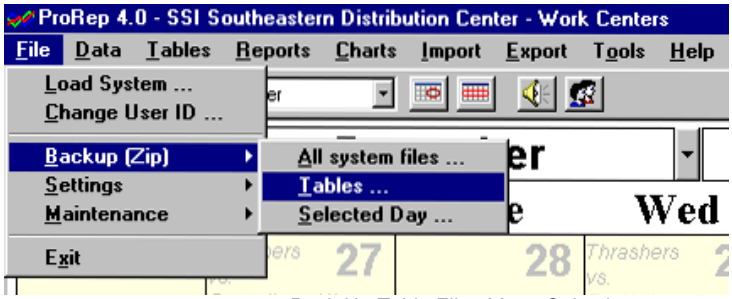
Backing Up ProRep

After week-end procedures are complete, it is highly recommended a back up of the ProRep system is made. To perform a backup of the entire system select File, Backup (Zip), All System Files.



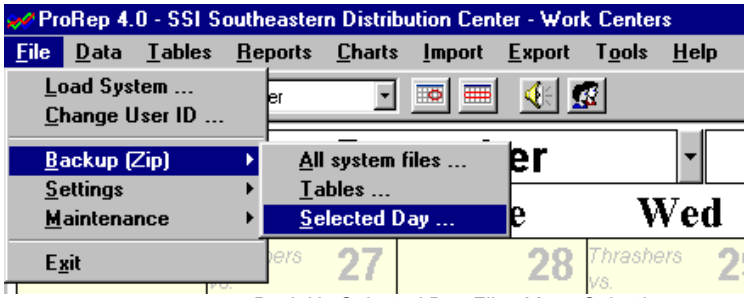
Back Up System Files Menu Selection

To perform a backup of the tables select File, Backup (Zip), Tables. This type of backup is used mainly for technical support from Spalding Software.



Back Up Table Files Menu Selection

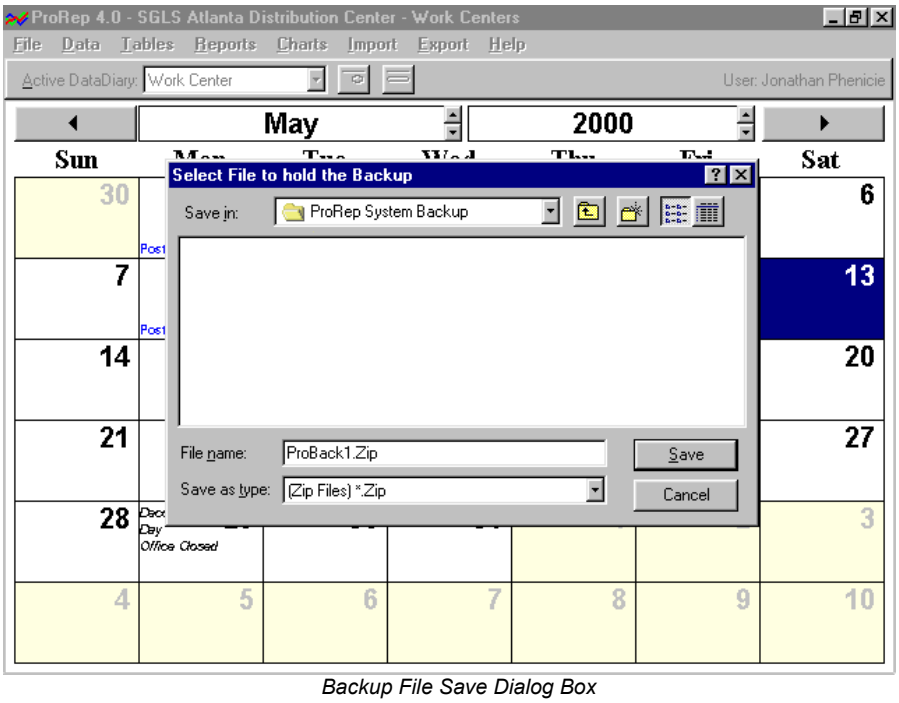
To perform a backup of a selected day select File, Backup (Zip), Selected Day. This type of backup is used mainly for technical support from Spalding Software.



Back Up Selected Day Files Menu Selection

The remaining steps are identical no matter which type of backup is being used.

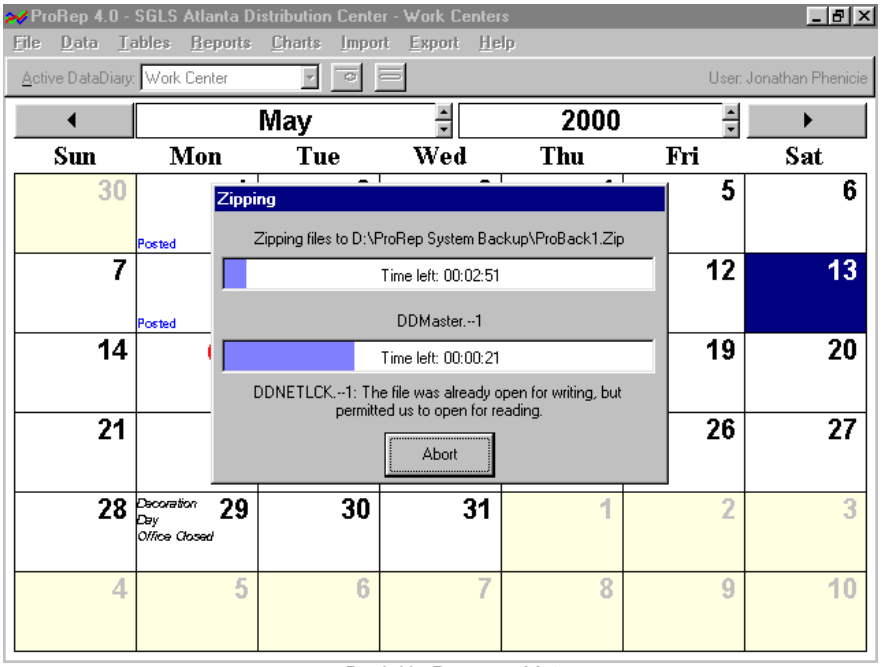
A dialog box is displayed prompting for the name and location of the backup file to be created.



Backup File Save Dialog Box

It is recommended that the back up system be stored on a different hard drive than the one containing the ProRep system. Several past versions of weekly backup files should be kept. At a minimum, the last two weeks should be kept. For example, the backup created on May 13th should overwrite the backup made on April 29th not the backup made on May 6th.

After clicking save, a progress meter showing the percentage complete is displayed. The backup time will vary depending on the size of the system.



Back Up Progress Meter

A backup can be performed at any time. It is recommended that a backup be performed at least once a week. If a backup needs to be restored, call Spalding Software for instructions and advice.

Automatic LAN Backups

Automatic LAN backups can be used to backup ProRep. It is not recommended however, to use an incremental backup. Since some ProRep files do not change for months or even years incremental backups will not restore a ProRep system.

Complete backups of all ProRep system files performed by an outside program are acceptable for backups.

This Page Intentionally Left Blank

Chapter 10: Entering Data Directly into ProRep

If you want to enter non production data like budgeted hours or planned volumes, see the section in Chapter 12: Using the DataDiaries that is titled Tracking Data Not Associated with an Activity

For each day that associates work, the associates' production data must be entered into daily production sheets. The data can be manually typed or scanned directly into a production sheet, or it can be imported from a file created by another computer system.

This chapter discusses the methods that can be used to enter data directly into ProRep by either the individual performing the work or by a data entry associate at a centralized location. The next chapter discusses methods of importing data from other software.

There are two methods for directly entering production data. The first method discussed in this chapter is used to enter data for the associate's entire day at the same time. This method is also used to correct data previously entered into a production sheet by any means. Using the second method, associates enter their own data immediately at the completion of each activity.

Key Entry into Production Sheets

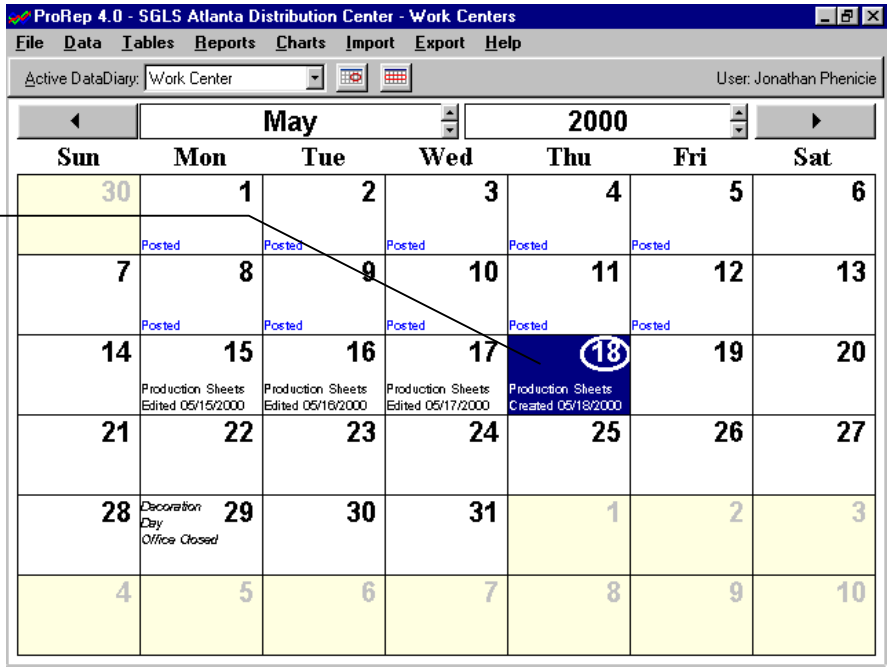
A good tool for making a production sheet form is Microsoft Excel.

This method is used to type in data for the associate's entire day at the same time. It is also used to correct data previously entered into a production sheet by either direct entry or importing the data from another computer system such as a WMS, pick-to-light or time & attendance system.

When using this methodology for entering production data, associates fill out a paper production sheet. At the end of the day, the paper production sheets are turned into a data entry associate who types in the data into a ProRep production sheet.

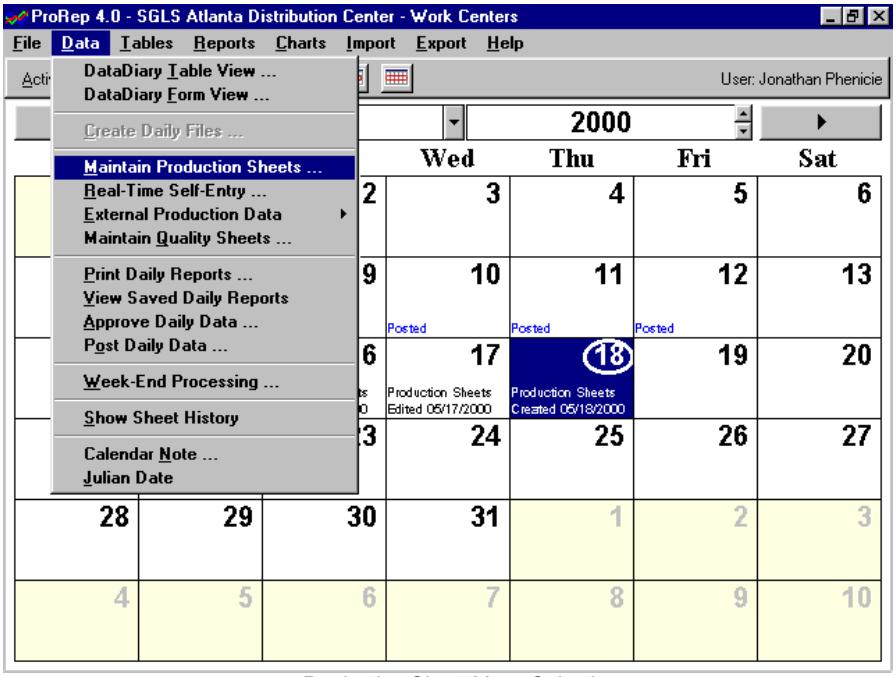
Each day has its own production sheet file. Before data can be entered into a production sheet, the daily files, which includes a production sheet file, must be created for that day. To create the daily files, highlight the date on the calendar and select Data, Create Daily Files. See Chapter 8: Daily Procedures for more information on how to create the daily file.

If production sheets have been created for a day it will be noted on ProRep's calendar control.


ProRep 4.0 - SGLS Atlanta Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
User: Jonathan Phenicie
May
2000
Sun Mon Tue Wed Thu Fri Sat
Posted
Production Sheets Edited 05/15/2000
Production Sheets Edited 05/16/2000
Production Sheets Edited 05/17/2000
Production Sheets Created 05/18/2000
Decoration Day Office Closed

ProRep's Calendar Control

To edit production sheets highlight the desired day, select Data, Production Sheets, Edit.

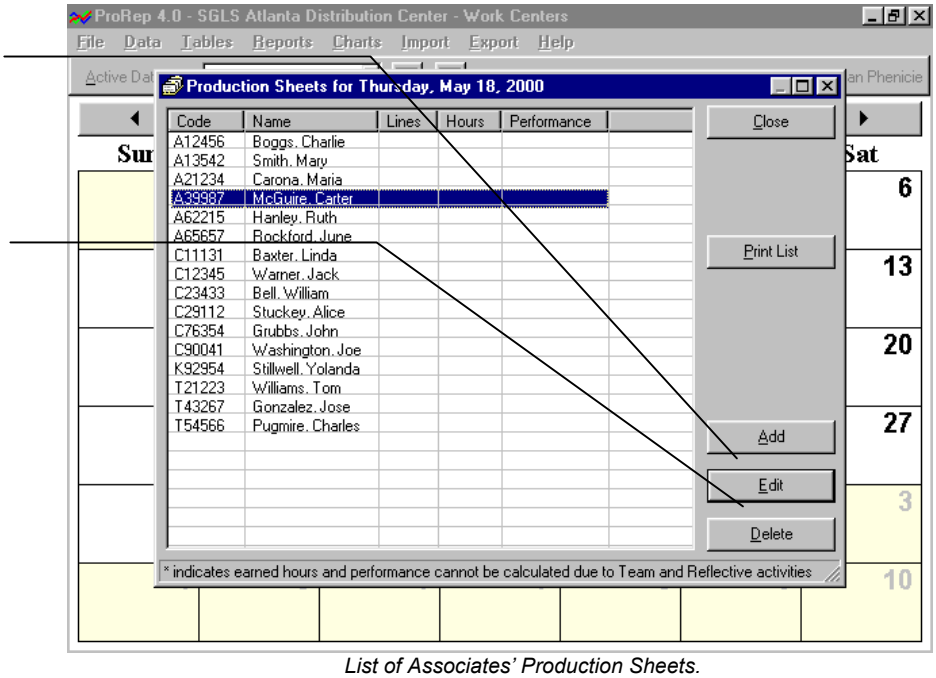


Production Sheet Menu Selection

A list of associates will be displayed.

To start a new production sheet for an associate, or add additional lines, select Add.

To make changes to an associate's production sheet select Edit.



List of Associates' Production Sheets.

Each associate has one production sheet in this file, even if they work in multiple work centers. The associate's production sheet contains a record (or line) for each activity that is performed.

Starting a New Production Sheet for an Associate

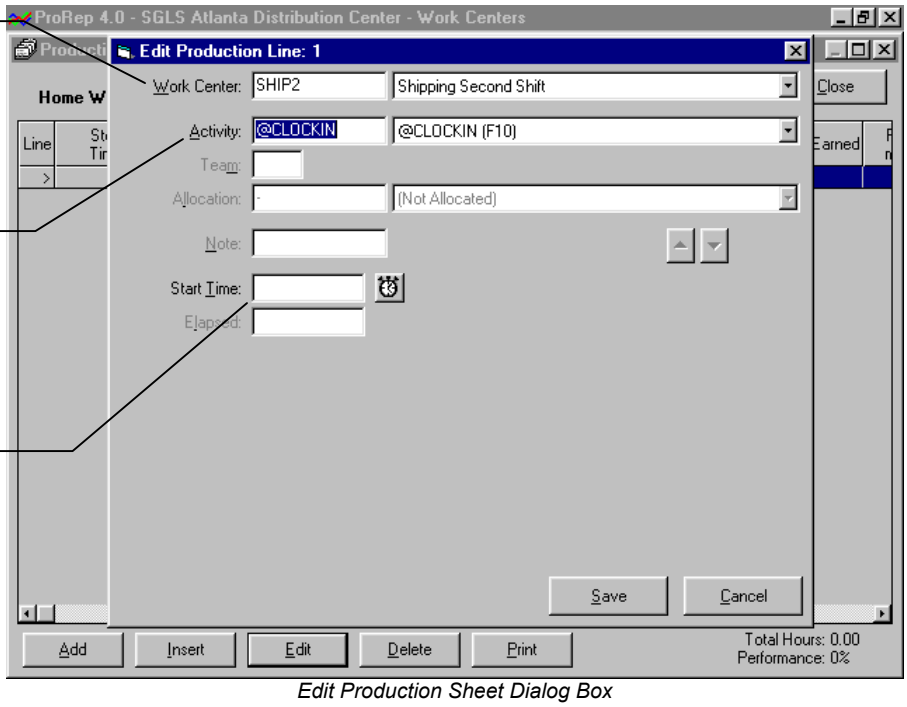
To begin entering data for an associate, highlight the associate and click the Add button. The Edit Production Line dialog is displayed.

An associate's production sheet should always start with a clock in time.

The associate's work center is pre-filled with either the associate's home work center or the last entered work center.

An Activity must be assigned for every minute of an associates work day. The first line on the production sheet is always a clock in.

ProRep understands both 12 hour and 24 hour clock formats. However, do not change the type from one line to another.



Edit Production Sheet Dialog Box

Enter the associate's start time and click save. Each entry in the dialog box is a line on the production sheet. When a line is saved the next line automatically opens.

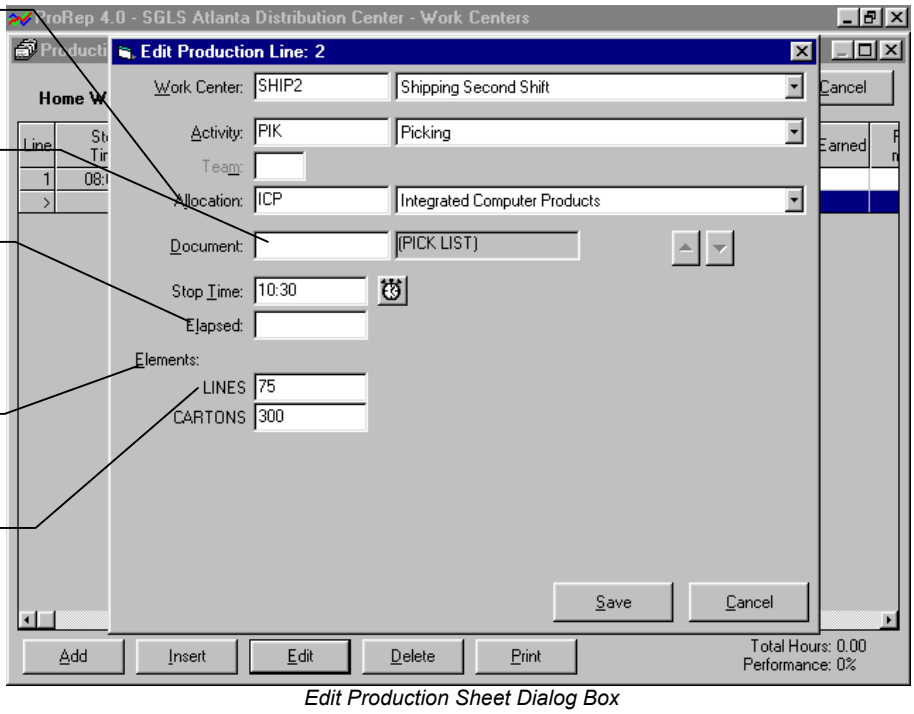
Some activities must be allocated. This setting is specified when the activity is setup.

If a document number is required enter it

Enter the clock time at the completion of the activity or the elapsed time it took to complete it.

Depending on the activity, different elements are listed.

If the activity has been set to search for the document in the Lookup file, the units for one or more of the activities will be pre-filled.



Edit Production Sheet Dialog Box

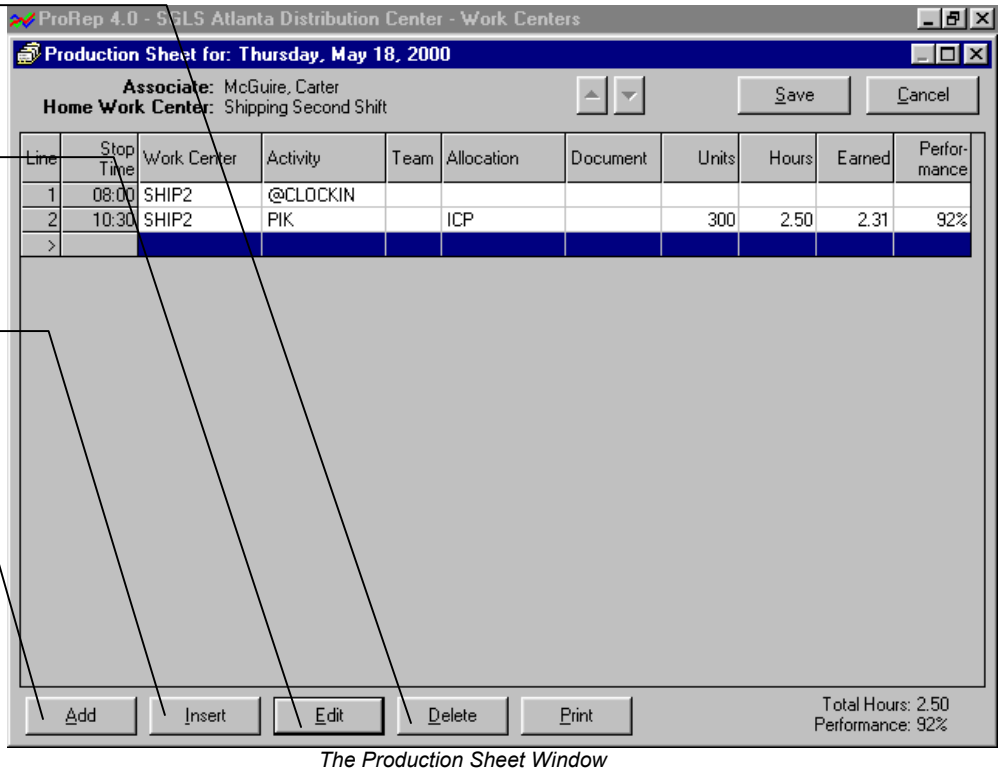
When all of the lines have been entered click the Cancel button or <ALT>+C. The entire production sheet will be displayed.

Deletes the highlighted line on the production Sheet.

Edit Selects the highlighted line for modification.

Insert will add one or more lines lines of production data between two existing production lines.

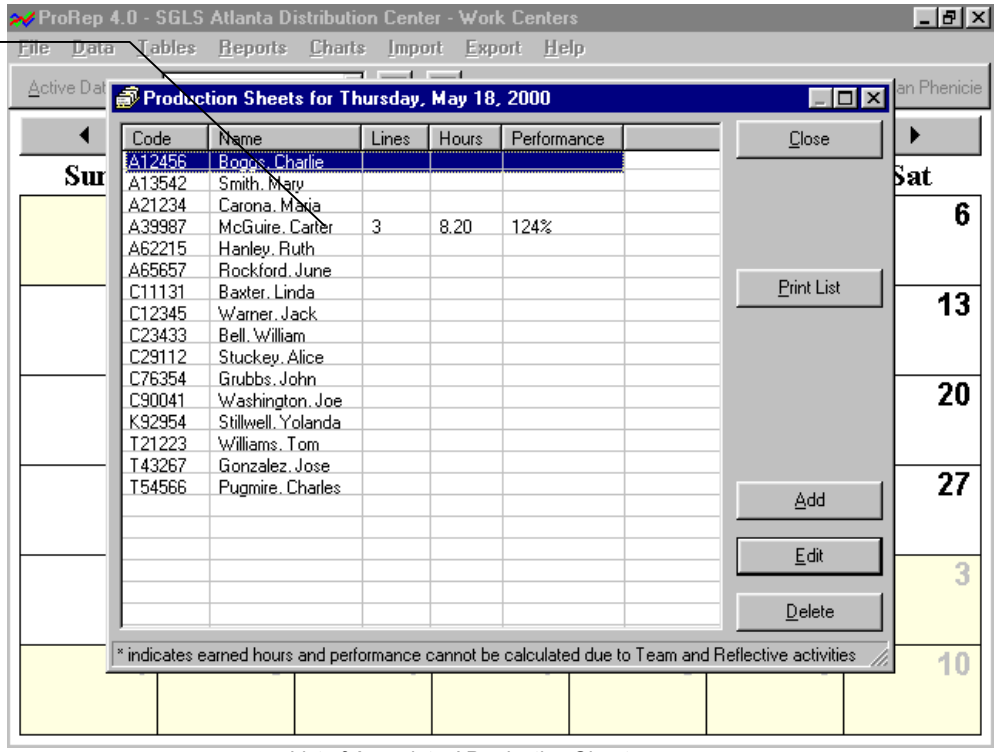
Add will add one or more lines of production data to the end of the list.



The Production Sheet Window

Every line entered in edit mode will be displayed on a separate row. Click Save to exit the production sheet and return to the list of associates.

Statistics about each associate's production sheet are shown here.



List of Associates' Production Sheets

Highlight another associate to continue to enter production data or click the close button.

Entering a Break and Other Activities Occurring in the Middle of a Job

In most ProRep systems, an activity is set up for breaks. Breaks normally are taken at the same time every day. Usually, they occur while in the middle of another activity.

The most convenient way to handle a break is by entering the elapsed minutes of the break and not a stop time. The break's elapsed minutes are subtracted from the next activity entered with a stop time.

For example, a picking job is completed and entered on the production sheet at 9:30 and the associate starts a packing job. At 10:00 the associates takes a 15 minute break which is entered as 15 elapsed minutes. The associate returns from break, finishes and enters the packing job at 10:30. The packing job is assigned 45 minutes. It is the 60 minutes between 9:30 and 10:30, less the 15 minutes assigned to break time.

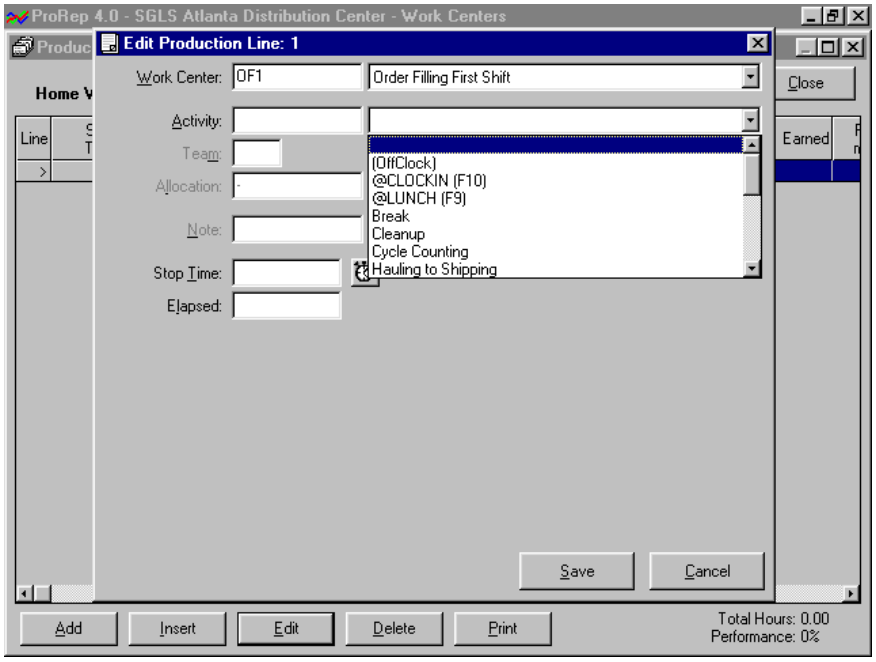
The time for any activity, even measured activities, can be subtracted out of the time of another activity by entering the elapsed time of the interrupting activity. In fact, the time for several activities can be subtracted from the same activity.

For example, an associate's only job during a day is training. The associate clocks in at 8:00 and clocks out at 4:30. The only other events that occur during the day are a 15 minute break, and a 30 minute lunch. The clock-in is entered as 8:00. The break and lunch are entered as two separate elapsed times. The General Clerical activity is entered with a stop time of 4:30.

Removing Lunch and Other Non-Paid Time

Press the <F9> key to enter @LUNCH into the activity code field

The special activity code of @LUNCH is used for removing the time for lunch from the associate's hours worked. The time for lunch, like breaks discussed previously, is usually entered as the amount of elapsed time. The elapsed time is subtracted from the next activity entered with a stop time.



The special activity code of OffClock is used for removing time from the associate's hours worked. It can be used to remove the time that an associate spends out of the building attending a parent-teacher conference or a doctor's appointment.

Associates Entering Their Own Data

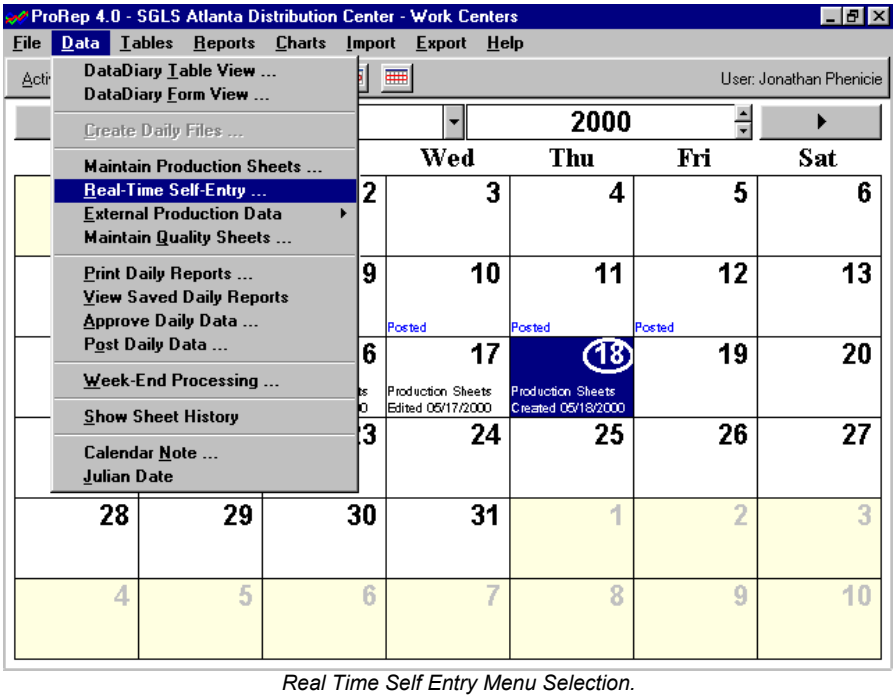
Associates can enter their own data directly into ProRep using the Real-Time Self-Entry feature. This requires that there are one or more PC's in their work area connected to a LAN and running ProRep. Although not a requirement, the PC's are usually equipped with a bar code reader.

At the completion of each task, the associate enters their data by scanning bar codes or by using the keyboard. The associate's performance for the activity and for the day are displayed.

Real-Time Self-Entry is often combined with the Lookup feature discussed in Chapter 11: Acquiring Production Data from Other Computer Systems. With the Lookup feature, after an associate scans or enters a document number, ProRep looks up the document's units such as the number of cartons and locations from the Lookup file. This reduces the time it takes the associate to enter their data and guarantees accuracy.

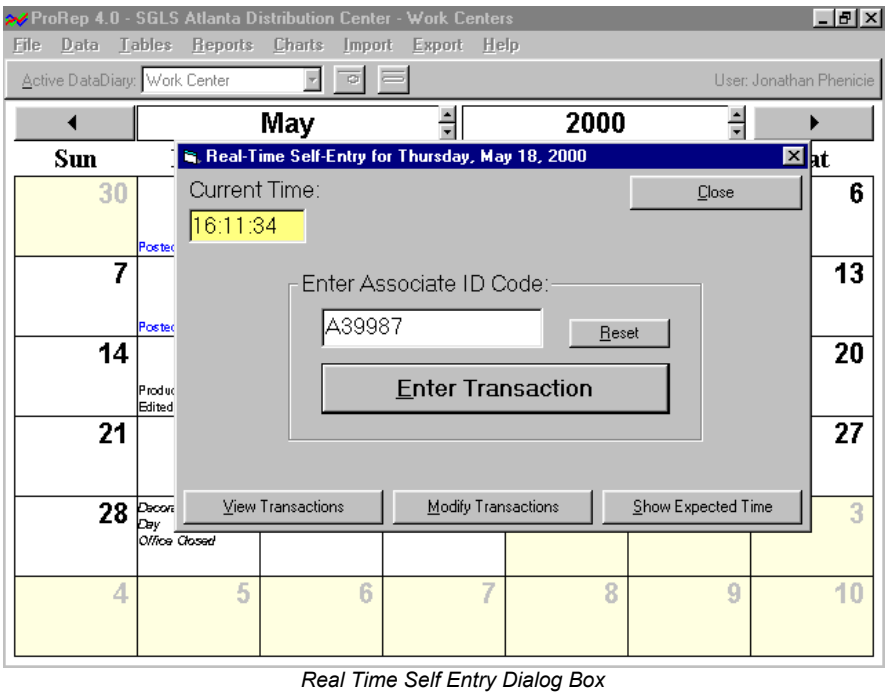
Starting Real-Time Self-Entry

To start real-time self-entry, highlight the current day, select Data, Production Sheets, and Real-Time Self-Entry.



Real Time Self Entry Menu Selection.

The Real Time Self Entry window is displayed

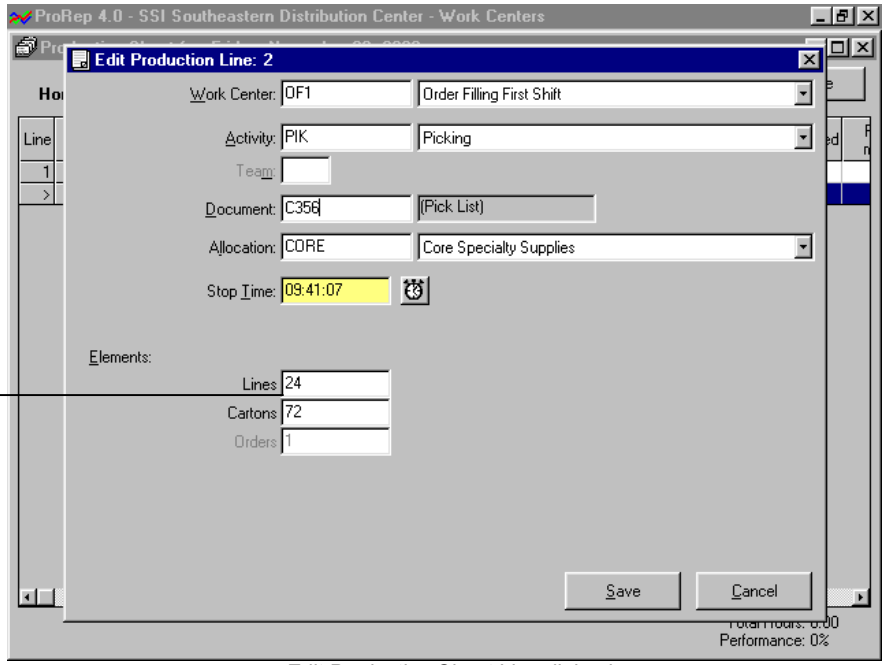


Real Time Self Entry Dialog Box

An associate's ID code is scanned or entered into the dialog box. The edit production line dialog box will be displayed.

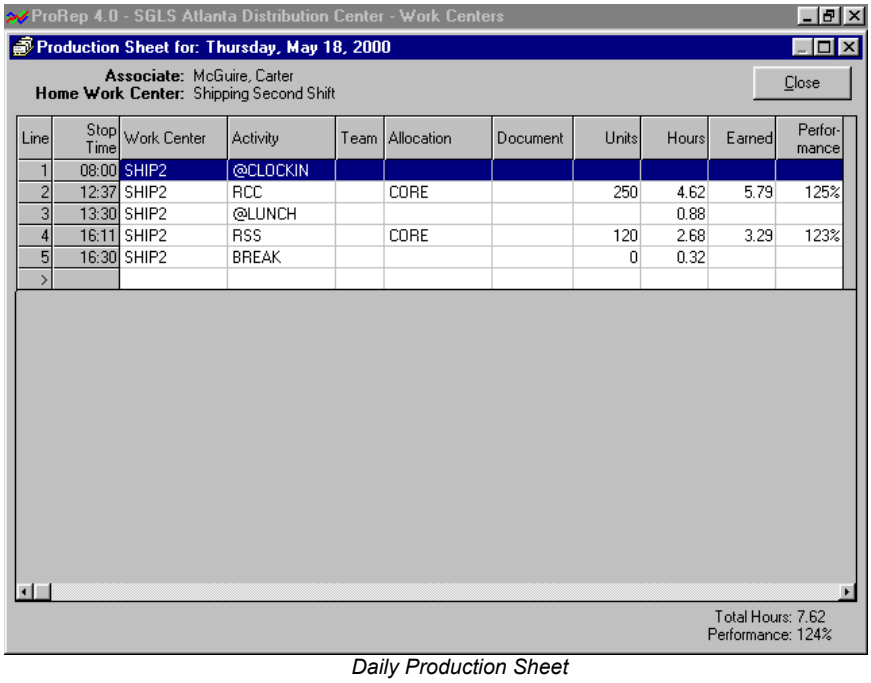
Some activities are set up to allow several documents and their element units to be entered at the same time, without closing the window.

If the activity has been set to search for the document in the Lookup file, the units for one or more of the activities will be pre-filled.



Edit Production Sheet Line dialog box

The activity is then entered on the production sheet as previously described in this chapter. The stop time is set when the save button is clicked. The entire production sheet for the day is displayed.

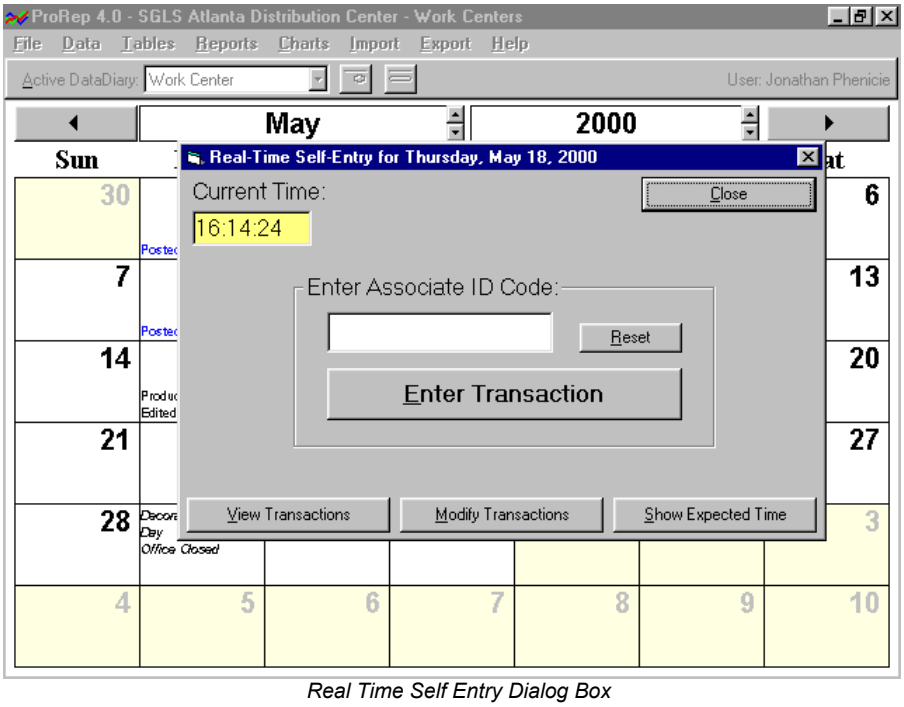

ProRep 4.0 - SGLS Atlanta Distribution Center - Work Centers
Production Sheet for: Thursday, May 18, 2000
Associate: McGuire, Carter
Home Work Center: Shipping Second Shift
Close
Total Hours: 7.62
Performance: 124%

Line	Stop Time	Work Center	Activity	Team	Allocation	Document	Units	Hours	Earned	Performance
1	08:00	SHIP2	@CLOCKIN							
2	12:37	SHIP2	RCC		CORE		250	4.62	5.79	125%
3	13:30	SHIP2	@LUNCH					0.88		
4	16:11	SHIP2	RSS		CORE		120	2.68	3.29	123%
5	16:30	SHIP2	BREAK				0	0.32		

Daily Production Sheet

The performance on the activity and up to this point for the day are displayed. To close the window press the escape key <Esc>. The window will close automatically after a few seconds.

The Real Time Self Entry dialog box is re-displayed and another associate can enter data.



Real Time Self Entry Dialog Box

Entering Break, Lunch and Other Interrupting Events

If an associate is interrupted while in the middle of a job to temporarily work on a different activity, the associate indicates on the terminal that an interruption has started by entering a the special pre-defined activity code of Pause ($PA). When the associate completes the interrupting activity and is ready to return to the original job, the associate enters the code for the activity that caused the interruption.

The elapsed time between the Pause ($PA) and the next Activity Code that is entered is subtracted from the time it takes to complete the original job. The time that is subtracted is charged to the interrupting activity. Examples of other activities for which this feature is often used include meetings, down time and rush jobs.

When Associates are entering their own production data, a break activity must be set up with a code of BREAK.

Breaks ($BR) and lunches ($LR) are also entered by entering special pre-defined activity codes. Breaks and lunches can be handled using the "pause" method to capture their exact time. However, this can result in a planned 15 minute break actually being 14 or 16 minutes. Most users want lunches and particularly breaks to be the exact number of minutes that are allowed for them.

To force a break to be exactly 15 minutes, enter the number of minutes as additional characters at the end of break's special activity code. The code for a 15 minute break is $BR15.

There are several Special Activity Codes that cause ProRep to take specific actions when entering transactions. Following is a list of the special activity codes and an explanation of their uses.

Special Activity Codes

$CI	**Clock-In**	The start work time for the day
$CO	**Clock-Out**	The stop work time for the day. All $CO transactions before the last one are ignored. After the $CO activity is entered, ProRep prompts for the clock out time for the day. The stop time of the most recently entered prior transaction entered by the associate is adjusted to the manually entered clock out time
$LRnn	**Lunch**	The stop time of a non-paid lunch period. The nn is an optional parameter. The nn is the number of minutes to be assigned to the lunch period transaction. For example, if a $LR20 is entered, 20 minutes will be used for lunch. The recommended method is to include the nn minutes for lunch.
$BRnn	**Break**	The stop time of a non-paid lunch period. The nn is an optional parameter. The nn is the number of minutes to be assigned to the lunch period transaction. For example, if a $LR20 is entered, 20 minutes will be used for lunch. The recommended method is to include the nn minutes for lunch.
$PA	**Pause**	The start time for an activity that interrupts a job
$PC	**Pause-Clear**	Cancels the previously entered $PA (Pause).

Clocking Out at the End of the Day

At the end of the day, associates normally enter a final clock-out transaction. To clock out, the associate scans or enters the special activity code of $CO. The current clock time is pre-filled as the stop time. The associate can manually change the stop time to the correct clock-out time for the day. The stop time of the prior transaction entered by the associate is adjusted to the clock out time.

This method allows associates to clock out of ProRep before the actual time that they leave. For example, an associate in shipping works from 8:00 to 4:30. At 4:20 they stop shipping and work on cleaning up the area for the remainder of the day. At 4:20 the associate enters the shipping activity, immediately followed by the clean-up activity and immediately followed by the clock-out activity for which the associate changes the pre-filled stop time from 4:20 to 4:30. When the Daily Production Report is printed, it will list the last activity as clean-up with a stop time of 4:30.

Associates Sharing a PC

By default, an associate is not logged onto a PC. Each time before an associate scans or enters an activity they scan or enter their associate ID code (associate number). Therefore, several associates can share a single PC. Also, an associate can use any number of different PC's during a day to enter their data.

Assigning a PC to an Associate

If advantageous, an associate can log onto a PC for an entire session. When an activity is entered, the associate is not prompted for their associate ID code. ProRep assumes that the transaction is performed by the logged on associate. This feature is useful when an associate must enter an activity every few minutes or seconds. This feature is enabled for an associate by setting up the associate as a ProRep user with a level of "Self Transaction Entry". For more information see the section titled Adding a New User in Chapter 5: Setting Up a New ProRep System.

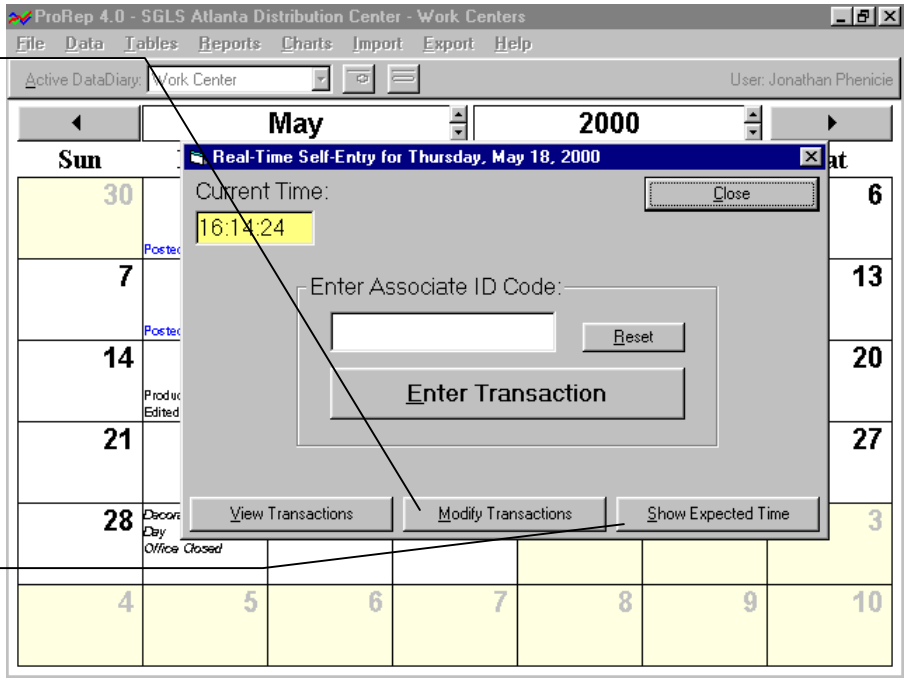
Viewing an Associate's Transaction

At any time, an associate can view their transactions. They can review all their activities along with the hours and performance. To view, enter the associate ID code and click the View Transactions button. If a mouse is not available press and hold down the Alt key while also pressing the V key.

Modifying Previously Entered or Missed Transactions

A supervisor can be given the rights to change or add production data by giving them the Transaction Modifier User Level. Other user levels that can modify are administrator and operator.

A Transaction Modifier User can modify production sheets from this dialog box.



Displays the amount of time it should take to complete a job.

Displaying the Time It Should Take to Complete an Activity

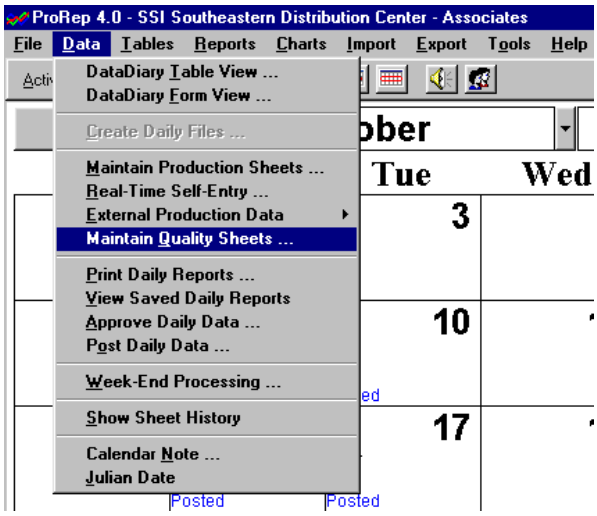
ProRep can display the amount of time it should take to complete a job. It also displays the time when the activity should be finished at a 100% performance level.

Closing Real-Time Self-Entry

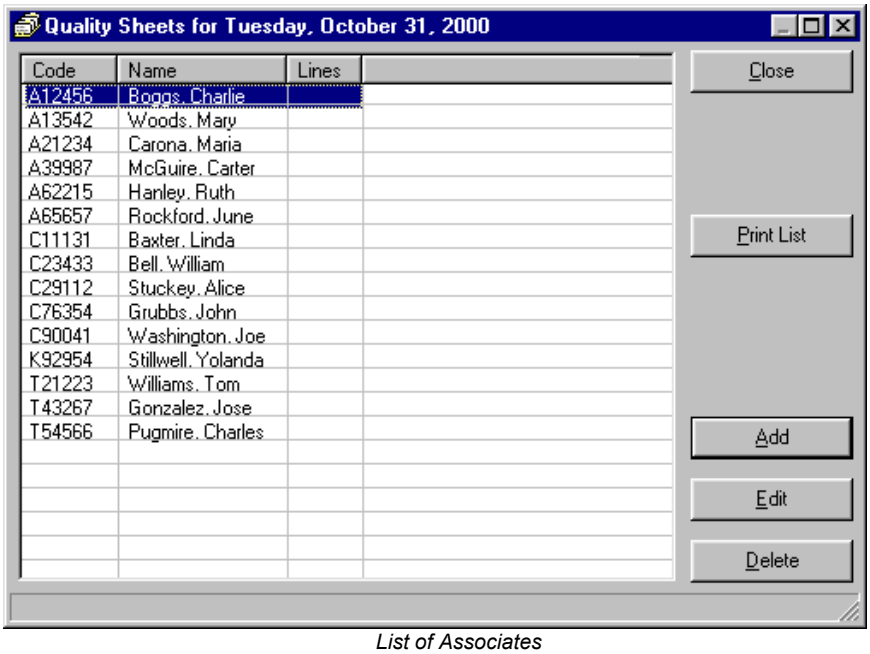
Starting Real-Time Self-Entry requires a used ID and password. Usually, it is started by a supervisor or lead associate. If the window were accidentally closed, it might take some time before the supervisor or lead could re-start the Real-Time Self-Entry. To prevent accidental closure, a user ID and password is required to close the window.

Entering Data Into Quality Sheets

Quality sheets are similar to production sheets. When daily files are created the quality sheets are created. To add or edit quality sheets click on the desired day, then select Data, Maintain Quality Sheets.



A list of associates is displayed.



List of Associates

Quality sheets are usually entered into ProRep from manually maintained logs kept by an auditor. Select the associate who performed the audits and click Add.

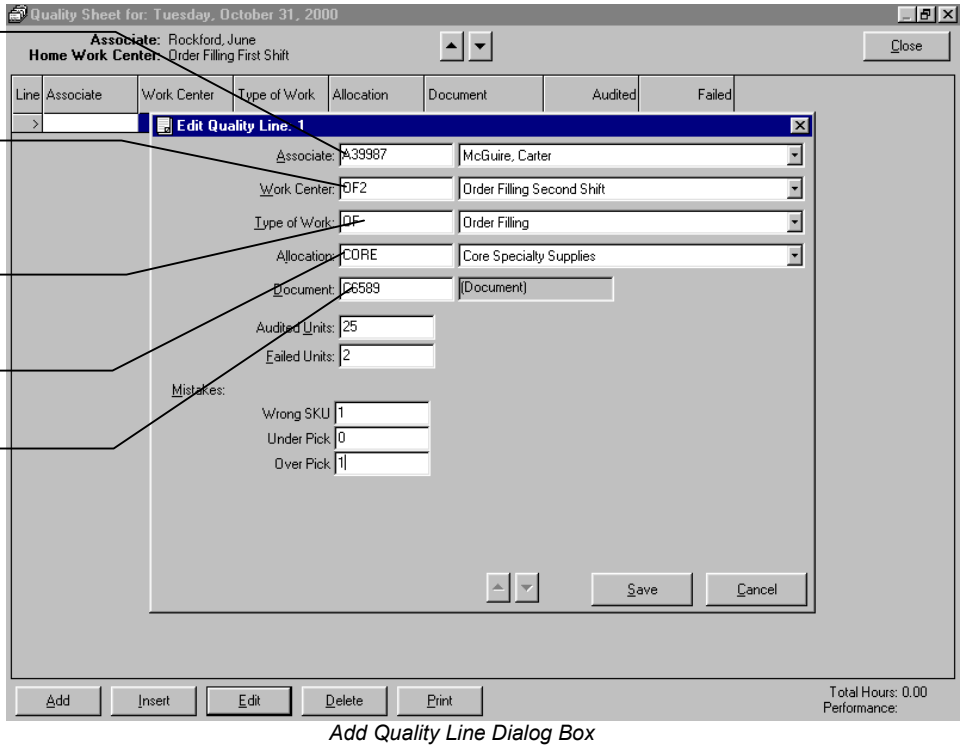
Enter the Associate that was audited.

Enter the work center where the work was performed.

Enter the Type of Work

Enter the Allocation.

Optionally a Document Number can be entered.



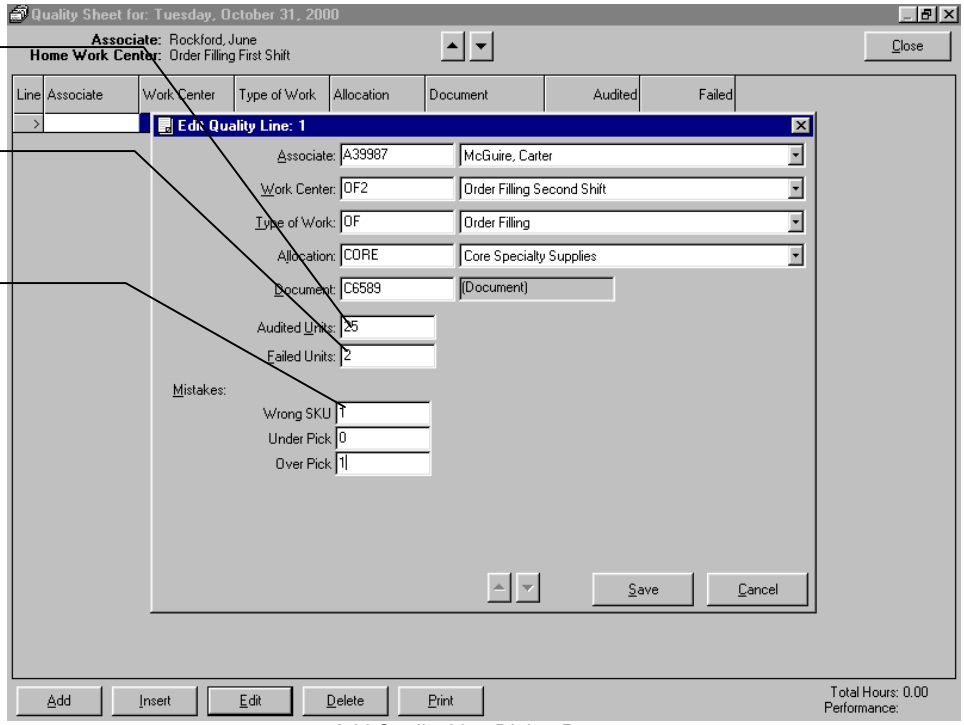
Add Quality Line Dialog Box

The quality sheets are entered in a similar manner to production sheets.

Enter the number of Audited Units

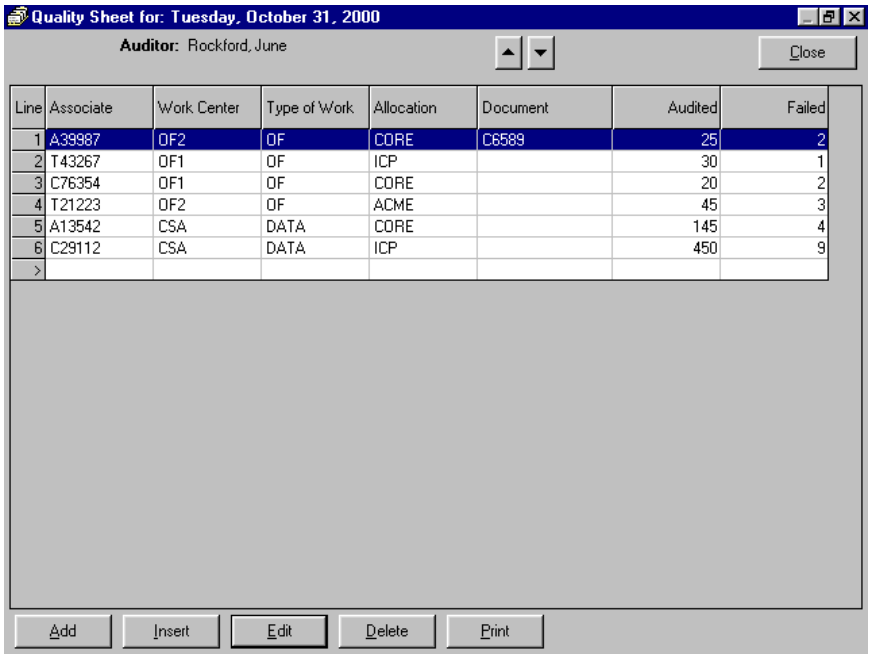
Enter the number of units that failed the audit.

Enter the number and type of mistakes made.



Add Quality Line Dialog Box

When entry of the audit is complete, click the Save button. After all audits performed by the auditor have been entered click the Close button.



Click the Save button to return to the list of auditors.

This Page Intentionally Left Blank

Chapter 11: Acquiring Production Data from Other Computer Systems

Importing Data from a Warehouse Management System

Appearing in a later version of the manual.

Importing Data from a Time and Attendance System

Appearing in a later version of the manual.

Getting Units from Another Computer System While Entering Production Data

In some operations, a warehouse management system (WMS) or other computer system knows in detail the tasks to be performed before they are started. However, the WMS is not updated with information about who did it and when they did it. This is the situation in many order filling operations where the associates are picking from printed pick lists or batches of pick labels. In these cases, ProRep can be instructed to look up the units associated with a document number from a file created by the WMS specifically for ProRep.

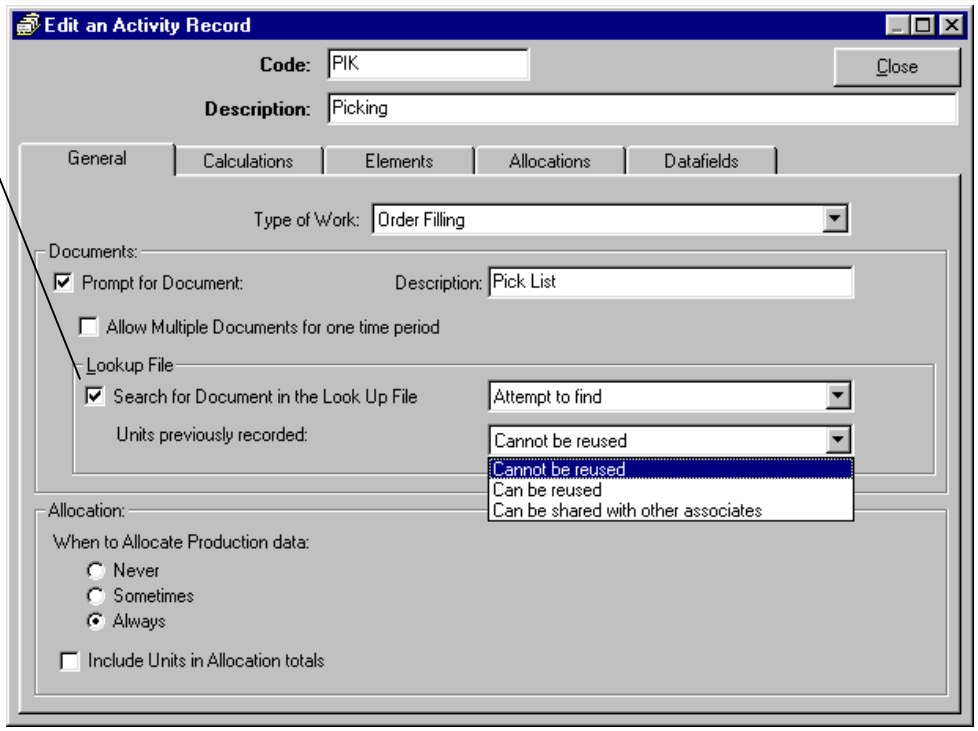
For example, if a WMS creates a Lookup Import File with pick list or batch numbers and the associated units, ProRep can look up the units as the document numbers are entered into ProRep. The look up can occur either during central key entry of hand written production sheets or, more likely, as an associate scans or enters production transactions directly into ProRep.

ProRep can look up the units based on matches to:

- Document Number only.
- Document Number and the element's unit of measure description such as orders, cartons, totes, pallets or lines. If the element descriptions are not included in the records of the Lookup Import File, ProRep assumes that the lookup units belong to the first element included on the activity.

When entering a job completion transaction, ProRep is instructed whether to perform a look up by a setting in the ProRep activity's record. ProRep performs the look up immediately after the document number is entered.

The Activity's Lookup file settings are on the activity dialog's General Tab.



There are two types of look up:

Attempt Try to look up the document. If it is not found, allow manual entry of the number of units completed.

Must Find Try to look up the document. If it is not found, it is considered an invalid transaction and manual entry of the units completed is not allowed.

If the document's record is found in the lookup file but has already been used on a previous transaction, the following permissions are supported:

Allow Reuse Allow this record and the original number of units to be used, even if it is already used by another ProRep transaction.

No Reuse Do not allow this record to be used by this transaction if it is used by any other ProRep transaction.

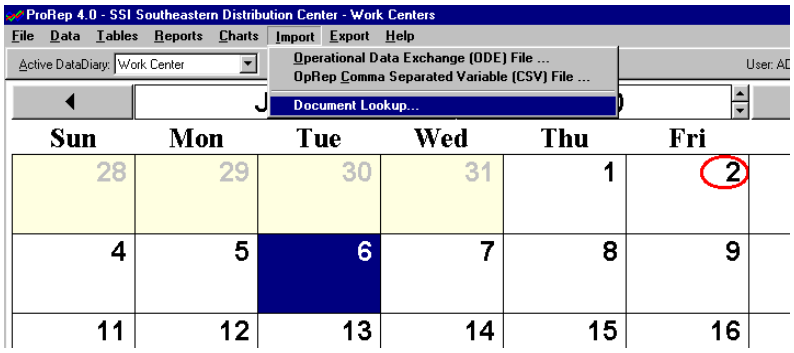
Share Units Allow the remaining units not reported on other ProRep transactions to be used by this transaction.

There are no special procedures required to start using the look up feature. If there is no lookup file, the file is automatically created during the import procedure described below.

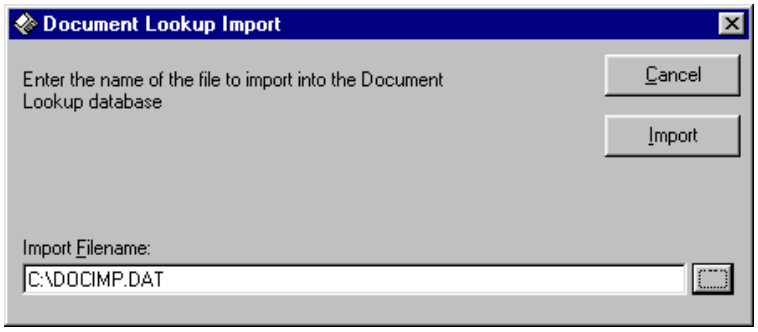
The information is kept in the lookup file for approximately ten days. Every time a record from the lookup file is used, the date it was used, the associate number and the number of units completed are written to the record.

Importing Data into the Document Lookup File

The Lookup Import File created by the WMS is imported into the ProRep lookup file t least once per day. Information can be imported as many times during the day as required. To import information into the lookup file, from the menu bar select Import, Document Lookup.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
Operational Data Exchange (ODE) File ...
OpRep Comma Separated Variable (CSV) File ...
Document Lookup...
Sun Mon Tue Wed Thu Fri
28 29 30 31 1 2
4 5 6 7 8 9
11 12 13 14 15 16

The Document Lookup Import dialog box is displayed.



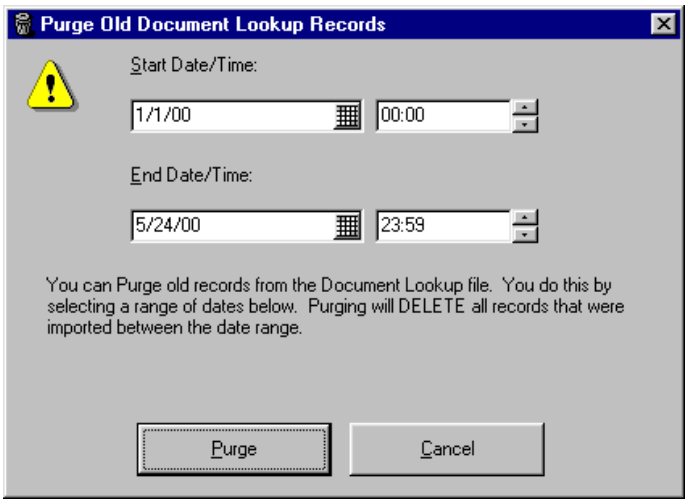
Enter or click the browse button to select the path and name of the Lookup Import File created by the other computer system. Next, click the Import button. The records from the Lookup Import File are added into the lookup file which also contains records from previous imports. The actual date and time of the import is written into each document lookup file record.

Manually Purging Records from the Lookup File

Records that are about 10 days old are automatically purged (deleted) from the lookup file. Therefore, it is unlikely that you will need to ever manually purge old

records. However, if bad records are unintentionally added into the lookup file you will want to remove them.

To purge records from the lookup file, from the menu bar select Files, Maintenance, Document Lookup, Purge. The Purge Old Document Lookup Records dialog is displayed.


Purge Old Document Lookup Records
Start Date/Time:
1/1/00
00:00
End Date/Time:
5/24/00
23:59
You can Purge old records from the Document Lookup file. You do this by selecting a range of dates below. Purging will DELETE all records that were imported between the date range.
Purge
Cancel

When records are imported into the document lookup file, they are stamped with the date and time they were imported. Enter the range of dates and times between which to delete the records.

Purging records makes the space the old record was using available to hold information for a new record, i.e. it makes the record blank. Packing the lookup file actually makes the file smaller by removing these blank records from the file.

Packing the Lookup File

It is very unlikely that the lookup file will become larger than it needs to be. However, if it does, it can be reduced to its minimal possible size by packing the file.

To pack the lookup file, from the menu bar select Files, Maintenance, Document Lookup, Pack.

Reindexing the Lookup File

If the power goes off during the process of importing records into or deleting records from the lookup file, the index may be corrupted. If ProRep displays a message that the file is corrupt, this procedure should be followed to fix the index.

To reindex the lookup file, from the menu bar select Files, Maintenance, Document Lookup, Reindex.

Layout of the Lookup Import File

This section details the layout of the file to be provided to ProRep by the other computer system. The file must be downloaded or transferred to a folder or directory accessible by ProRep. It must be an ASCII file with a carriage return - line feed pair (13,10 decimal; 0D,0A hexadecimal) as the end of record indicator.

The only required fields are the Document and the Units. The records do not have be padded to the full length. A record can be ended after any field after the Units field. Fields can be skipped but must be blank filled.

Field Name	Start	Length	Type	Description
Document	1	16 *	C	document number to be looked up
Quantity	17	11 *	N	number of units or quantity
Element	28	15	C	element's unit of measure description
Allocation	33	10	C	allocation code
PR_FuncCode	53	10	C	projected function or type of work
PR_Date	63	8	N	projected completion date YYYYMMDD format
PR_WorkCtr	71	10	C	projected work center
PR_User1	81	10	C	projected user-defined field 1 (i.e. zone)
PR_User2	91	10	C	projected user-defined field 2 (i.e. isle)

Notes:

* = required

C = any printable ASCII character or numeric allowed

N = only ASCII numeric characters allowed

If the Element (unit of measure) data is provided, ProRep will only select records from the lookup file that match both the document number and the activity's element descriptions. If the Element data is not provided, the match is only on the document number and the units are assigned to the activity's first element.

PR_User1 and PR_User2 are user-definable fields which can be used to further breakdown the pending amount of work. For example, the Picking Area work center could be broken down by Zone. Then each Zone could be broken down by Aisle.

Importing Data from a Production Sheet Import File

See Appendix G: Production and Quality Import File Formats

.

This Page Intentionally Left Blank

Chapter 12: Using the DataDiaries

ProRep holds all of it's data in databases called DataDiaries. The DataDiaries supply the data to ProRep for all reports and graphs. Up to 9 years of information can be kept in a DataDiary. A ProRep system has three DataDiaries:

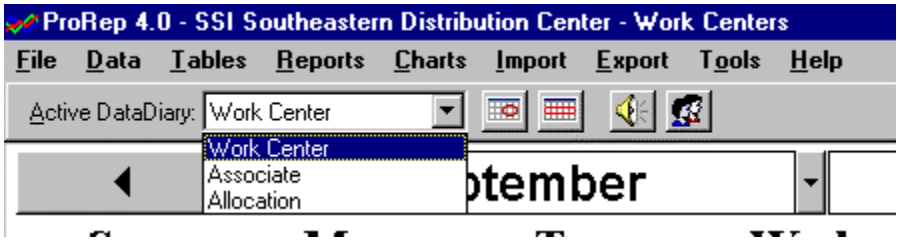
- **Work Center DataDiary**- contains a record for each day for each work center account.
- **Associate DataDiary** - contains a record for each week for each associate account.
- **Allocation DataDiary** - contains a record for each week for each allocation account.

The records in the DataDiaries contain the system-maintained datafields used to track the units and hours results of performing the various activities such as picking, packing and data entry. Printing the daily production sheet reports updates only the work center DataDiary with current results. Posting the production sheets updates all three DataDiaries.

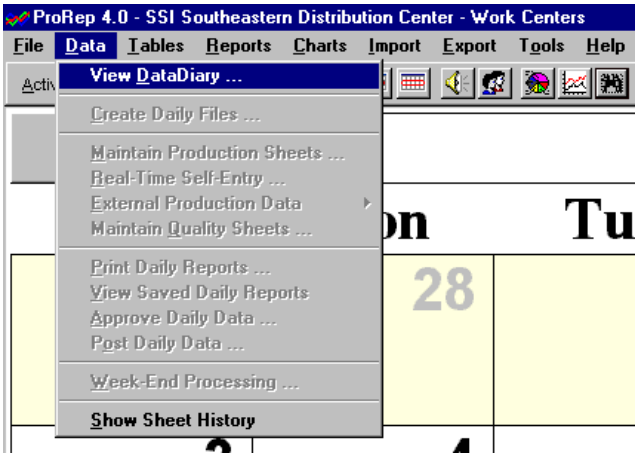
User-defined datafields can also be added into the DataDiaries to hold data that is not entered into production sheets such as planned and budgeted numbers. The data for these fields can be entered into the DataDiaries through keying, or importing the data from a file created by a spreadsheet program or another computer system.

Viewing Data in a DataDiary

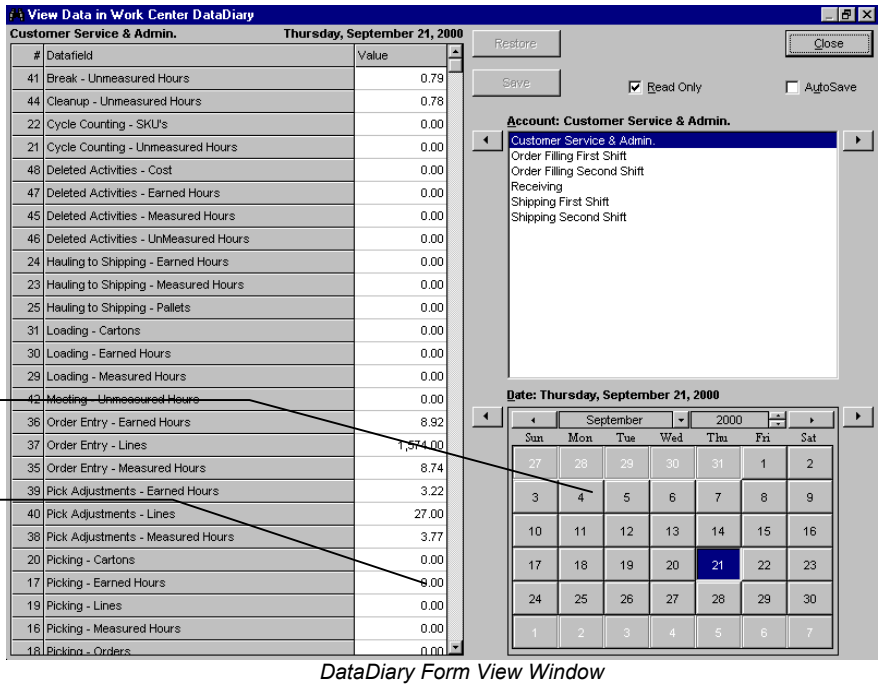
To view the DataDiary, make sure that the correct Active DataDiary is selected.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Work Center
Associate
Allocation

Then from the menu bar select Data, View DataDiary.



The following window is displayed.


View Data in Work Center DataDiary
Customer Service & Admin.
Thursday, September 21, 2000
Restore
Close
Save
Read Only
AutoSave
Account: Customer Service & Admin.
Customer Service & Admin.
Order Filling First Shift
Order Filling Second Shift
Receiving
Shipping First Shift
Shipping Second Shift
Date: Thursday, September 21, 2000
September
2000
Sun Mon Tue Wed Thu Fri Sat
Datafield Value
41 Break - Unmeasured Hours 0.79
44 Cleanup - Unmeasured Hours 0.78
22 Cycle Counting - SKU's 0.00
21 Cycle Counting - Unmeasured Hours 0.00
48 Deleted Activities - Cost 0.00
47 Deleted Activities - Earned Hours 0.00
45 Deleted Activities - Measured Hours 0.00
46 Deleted Activities - UnMeasured Hours 0.00
24 Hauling to Shipping - Earned Hours 0.00
23 Hauling to Shipping - Measured Hours 0.00
25 Hauling to Shipping - Pallets 0.00
31 Loading - Cartons 0.00
30 Loading - Earned Hours 0.00
29 Loading - Measured Hours 0.00
42 Meeting - Unmeasured Hours 0.00
36 Order Entry - Earned Hours 8.92
37 Order Entry - Lines 1,574.00
35 Order Entry - Measured Hours 8.74
39 Pick Adjustments - Earned Hours 3.22
40 Pick Adjustments - Lines 27.00
38 Pick Adjustments - Measured Hours 3.77
20 Picking - Cartons 0.00
17 Picking - Earned Hours 9.00
19 Picking - Lines 0.00
16 Picking - Measured Hours 0.00
18 Picking - Orders 0.00

Click on a date to view its data.

If the datafield is user-defined, data can be entered, modified, or deleted.

DataDiary Form View Window

The data for one account and one date is displayed in the left half of the window. In the right half of the window, are controls for changing the displayed date and account. To step through the accounts and dates, click the previous and next arrows. To jump to an account or date, use the controls to display it and then click on it.

Tracking Data Not Associated with an Activity

Most of the datafields are automatically set up by ProRep when an activity such as picking, packing or data entry is added. The datafields are set up in each of ProRep's three DataDiaries to hold the units and hours results of performing these activities.

User-defined datafields can be set up to hold data that is not entered into production sheets or otherwise produced within ProRep. Following are examples of typical information for which datafields can be established:

- Budgeted hours
- Planned units
- Actual payroll expense
- Total weekly hours from a time and attendance system
- Vacation hours

User-defined datafields along with system-defined datafields can be included on user-defined reports and graphs. For example, this allows comparing budgeted hours to the actual hours input into ProRep.

A user-defined datafield can be added to one DataDiary or to all three DataDiaries. There can be a maximum of 9,999 datafields.

To learn how to add user-defined datafields, see the section titled *Datafields* in *Chapter 6: Creating and Maintaining the Tables*.

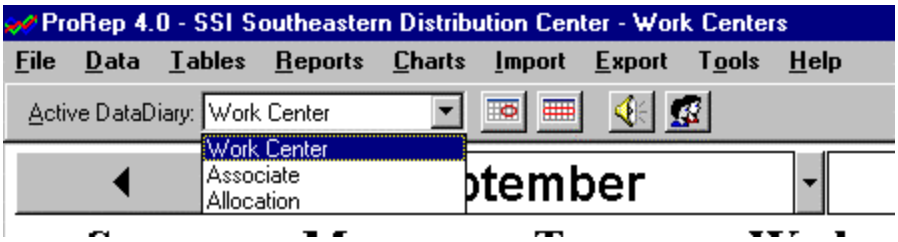
Entering and Modifying Data in the DataDiaries

Data for the system-maintained datafields is automatically maintained in the diaries. Printing the daily production sheet reports updates only the work center DataDiary with current results. Posting the production sheets updates all three DataDiaries.

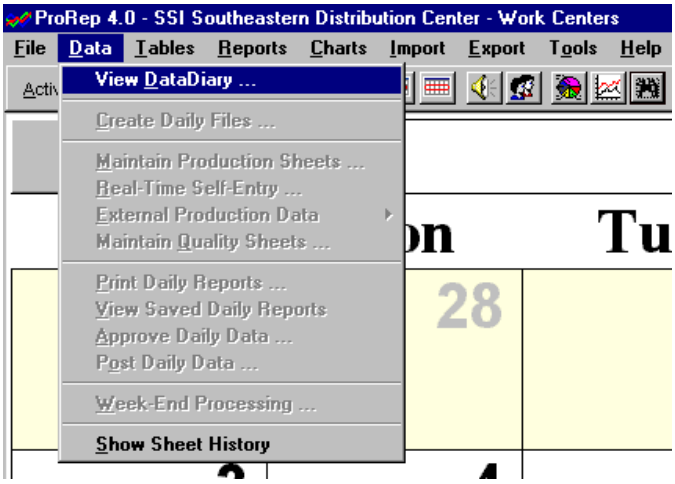
When the DataDiaries are Updated		
DataDiary	**When Production Sheets are Printed**	**When Production Sheets Are Posted**
Work Center	Yes	Yes
Associate	No	Yes
Allocation	No	Yes

The data in system-maintained datafields cannot be directly changed. After a daily production sheet is posted, the data in these fields can only be changed by using the feature to correct posted data.

Data for user-defined datafields is entered or modified by key entry. Data can also be imported from a file as discussed in the next section. To manually enter or modify data, make sure that the correct active DataDiary is selected.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Work Center
Associate
Allocation
tember

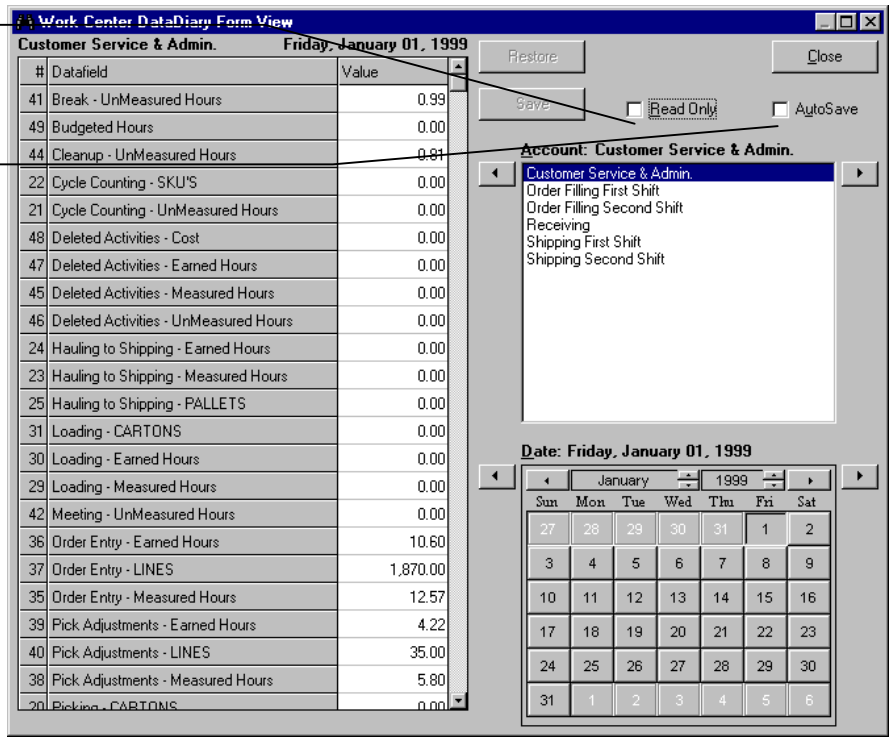
Then from the menu bar select Data, View DataDiary.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
View DataDiary ...
Create Daily Files ...
Maintain Production Sheets ...
Real-Time Self-Entry ...
External Production Data
Maintain Quality Sheets ...
Print Daily Reports ...
View Saved Daily Reports
Approve Daily Data ...
Post Daily Data ...
Week-End Processing ...
Show Sheet History
Tu
28

This displays the Form View window.

To edit the data un-check the Read Only check box.

To automatically save the data that has been changed without clicking the save button, check the AutoSave check box.



#	Datafield	Value
41	Break - UnMeasured Hours	0.99
49	Budgeted Hours	0.00
44	Cleanup - UnMeasured Hours	0.81
22	Cycle Counting - SKU'S	0.00
21	Cycle Counting - UnMeasured Hours	0.00
48	Deleted Activities - Cost	0.00
47	Deleted Activities - Earned Hours	0.00
45	Deleted Activities - Measured Hours	0.00
46	Deleted Activities - UnMeasured Hours	0.00
24	Hauling to Shipping - Earned Hours	0.00
23	Hauling to Shipping - Measured Hours	0.00
25	Hauling to Shipping - PALLETS	0.00
31	Loading - CARTONS	0.00
30	Loading - Earned Hours	0.00
29	Loading - Measured Hours	0.00
42	Meeting - UnMeasured Hours	0.00
36	Order Entry - Earned Hours	10.60
37	Order Entry - LINES	1,870.00
35	Order Entry - Measured Hours	12.57
39	Pick Adjustments - Earned Hours	4.22
40	Pick Adjustments - LINES	35.00
38	Pick Adjustments - Measured Hours	5.80
20	Picking - CARTONS	0.00

The Form View window is used to manually enter and change data in a DataDiary. The only type of users that can modify the data are an administrator, operator and data entry user.

When this window is initially displayed, it is set to read only mode to minimize the possibility of accidentally changing a number. To change the displayed data, un-check the Read Only box.

If entry errors are made while editing the data, click the Restore button to quickly change the data back to the original data stored in the DataDiary. Closing the window without saving will also discard any changes.

Importing Data from Another Application into a DataDiary

ProRep can read delimited files created by other computer programs. Data can be imported data from files created with Microsoft Excel, Access and many other applications. For example, budget data could be imported from an Excel spreadsheet or actual weekly payroll results from a time and attendance system.

When the data is imported from the delimited file, the imported data can replace the data, be added to the data, or subtracted from the data currently in the DataDiary.

Record Layout of the File to be Imported

The file to be imported must have each field separated by either commas or tabs. Each record in the file has the same layout as described below.

DataDiary Delimited Import File Layout			
Description	**Type**	**Length**	**Decimals**
Month*	Numeric	2	0
Day*	Numeric	2	0
Year*	Numeric	2 or 4	0
Account Code	Character	Max 10	
Datafield Number	Numeric	Max 9999	0
Quantity	Numeric	Max 16	0 to 14

* The month, day and year can be in any order. The month, day and year can also be in a single field provided that are separated by slashes (/) or dashes (-) such as 10/25/2005.

The Account Code is either the Work Center Code, the Associate Number or the Allocation Code depending on the DataDiary into which the data is to be imported.

The quantity can be either a whole number or a decimal number.

Below are two examples of delimited files that are properly formatted for importing into a DataDiary.

Example of Import File with date as one field

10-18-05, RCV, 131, 1045.75
10-25-05, RCV, 131, 985.24
10-18-05, OF1, 138, 232.79
10-25-05, OF1, 138, 132.26

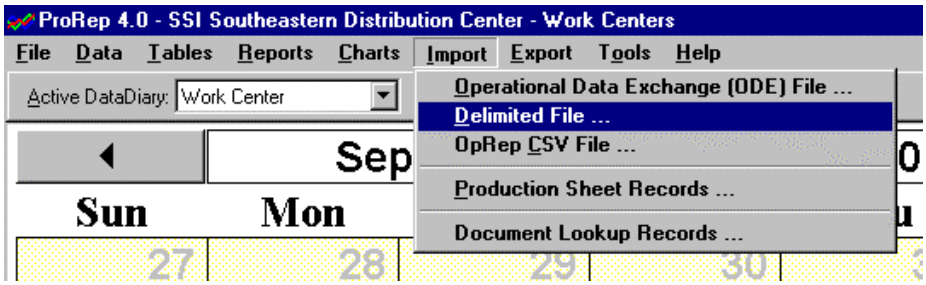
Example of Import File with date as separate fields

2005, 10, 18, RCV, 131, 1045.75
2005, 10, 25, RCV, 131, 985.24
2005, 10, 18, OF1, 138, 232.79
2005, 10, 25, OF1, 138, 132.26

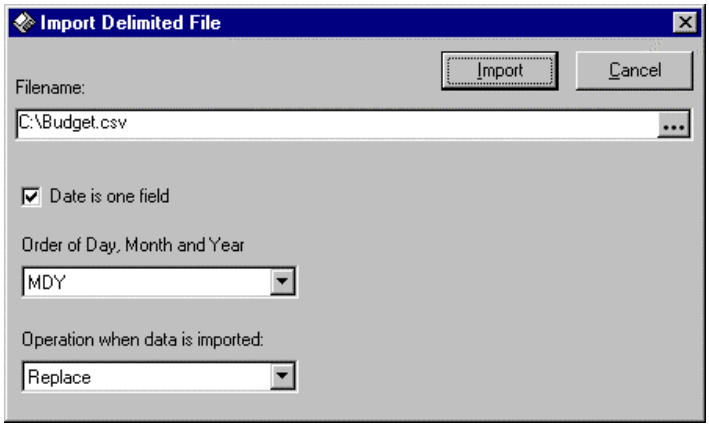
When using Microsoft Excel to create the file, from the Excel menu bar select File, Save As. In the Save as type field, select either Text (Tab Delimited) or CSV (Comma Delimited).

Importing the File

To import a delimited file into a DataDiary, select the active DataDiary and from the menu bar select Import, Delimited File.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Operational Data Exchange (ODE) File ...
Delimited File ...
OpRep CSV File ...
Production Sheet Records ...
Document Lookup Records ...
Sep
Sun Mon
27 28 29 30

The Import Delimited File dialog is displayed.



Select the file to be imported by clicking in the Filename field. Then browse the folders and files, select the file to be imported and click open.

If the date is in a single field, check the Date is one field check box.

Select the order of the date.

Select if the imported data is to replace the data, be added to the data, or subtracted from the data currently in the DataDiary

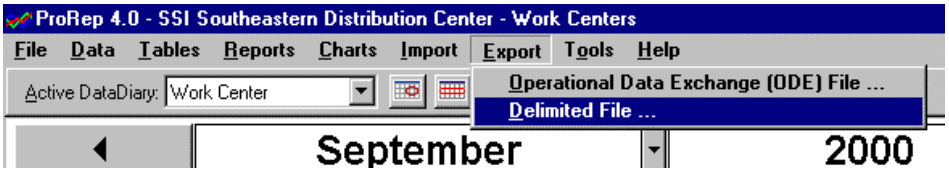
To begin the import process, click the Import button.

Exporting Data for Use in Another Application

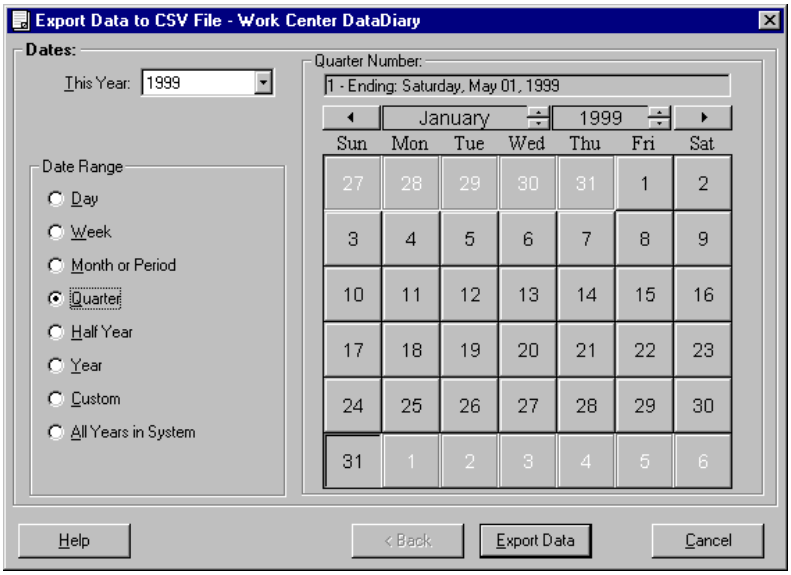
The data in a DataDiary can be quickly exported to a file that can be used by other programs and systems. The file that ProRep creates is a comma delimited file. The export file contains the data for all datafields and all accounts for the specified range of dates.

Note that data from both pre-defined and user-defined reports can also be exported directly into spreadsheet and database files such as Microsoft Excel and Access. When using this method, the report creation process can be used as a user-definable data extraction tool.

To export data, from the menu bar select Export, Delimited File.

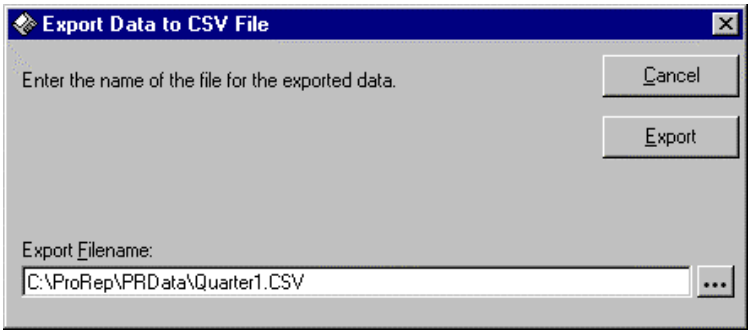

ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Operational Data Exchange (ODE) File ...
Delimited File ...
September
2000

ProRep then prompts for the length of time to be exported.



Data for any time period in the DataDiary can be exported to a file. In the example above, a quarter's worth of data is selected for exporting. To select which quarter to export click any date in the quarter and then click the Export Data button.

This displays a dialog box that prompts for the name of the file to be created.



Specify a name for the file and select the folder in which to save it. To finish the export process, click the Export button.

Three delimited files are created. All three file names begin with the name that is specified. However, two of the file names contain additional characters to distinguish them. Below are the names of the files that are created and a description of what they contain.

filename.CSV - Contains the actual numerical data from the DataDiary along with information specifying the data's date, account code and datafield number.

Record Layout: Month, Day, Year, Account Code, Datafield Number, Data

Example:

2,24,1999,"RCV",1,14.71
2,24,1999,"RCV",2,13.57
2,24,1999,"RCV",3,33
2,24,1999,"RCV",4,2016
2,24,1999,"RCV",5,5.64
2,24,1999,"RCV",6,5.06

filename-Accounts.CSV - Contains the account codes and descriptions in the CSV file. The accounts are either the work centers, associates or allocations depending on the DataDiary that from which the data was exported.

Record Layout: Account Code, Account Description

Example:

"RCV","Receiving"
"OF1","Order Filling First Shift"
"OF2","Order Filling Second Shift"
"SHIP1","Shipping First Shift"
"SHIP2","Shipping Second Shift"
"CSA","Customer Service & Admin."

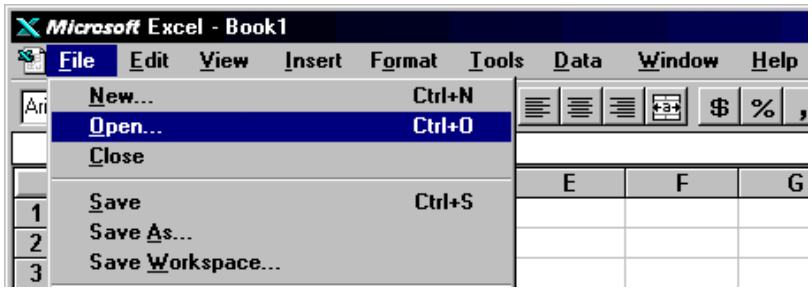
filename-Fields.FLD - Contains the datafield numbers and descriptions in the CSV file.

Record Layout: Datafield Number, Datafield Description

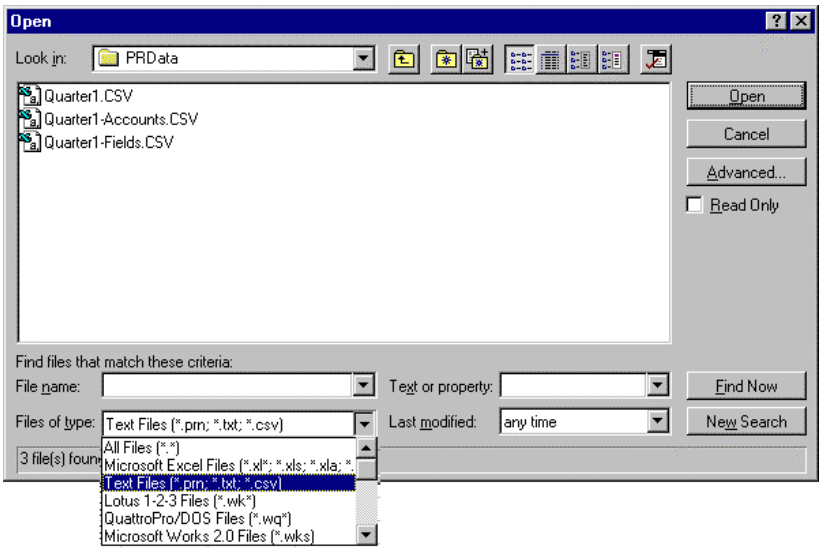
Example:

1,"Receive Common Carrier - Measured Hours"
2,"Receive Common Carrier - Earned Hours"
3,"Receive Common Carrier - Shipments"
4,"Receive Common Carrier - Cartons"
5,"Receive Consolidated - Measured Hours"
6,"Receive Consolidated - Earned Hours"

The exported files can be imported or opened in Excel, Access, and most other software. To use the data in Excel from the Excel menu bar select File, Open.

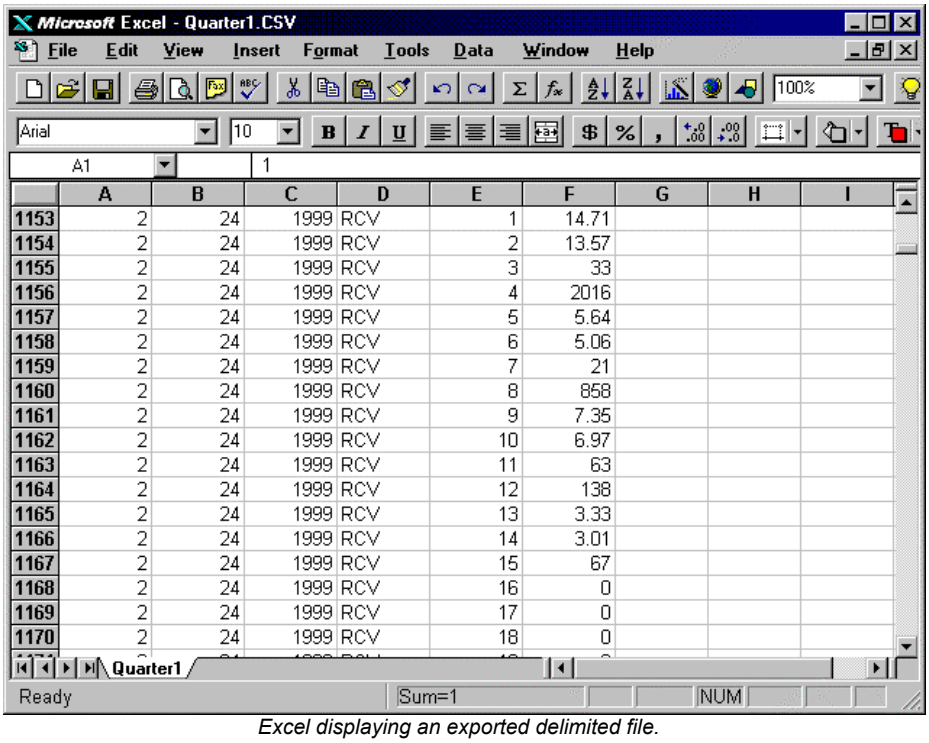


This displays the open file dialog.



Select Text Files from the drop down list of file types. Open the folder that contains the files created by ProRep. When the exported files are displayed, click on the desired file and click Open.

The data in the file created by ProRep is displayed.



	A	B	C	D	E	F	G	H	I
1153	2	24	1999	RCV	1	14.71			
1154	2	24	1999	RCV	2	13.57			
1155	2	24	1999	RCV	3	33			
1156	2	24	1999	RCV	4	2016			
1157	2	24	1999	RCV	5	5.64			
1158	2	24	1999	RCV	6	5.06			
1159	2	24	1999	RCV	7	21			
1160	2	24	1999	RCV	8	858			
1161	2	24	1999	RCV	9	7.35			
1162	2	24	1999	RCV	10	6.97			
1163	2	24	1999	RCV	11	63			
1164	2	24	1999	RCV	12	138			
1165	2	24	1999	RCV	13	3.33			
1166	2	24	1999	RCV	14	3.01			
1167	2	24	1999	RCV	15	67			
1168	2	24	1999	RCV	16	0			
1169	2	24	1999	RCV	17	0			
1170	2	24	1999	RCV	18	0			

Excel displaying an exported delimited file.

When the delimited file is opened in Excel, each column contains different information as shown below:

Column in Excel	Contents of the Column
Column A	Month
Column B	Day
Column C	Year
Column D	Account Code
Column E	Datafield Number
Column F	Data

When working with the exported data in Excel, the files containing the list of accounts and datafields should also be opened. This will allow for easier identification of the information in the file containing the actual data from the DataDiary.

This Page Intentionally Left Blank

Chapter 13: Printing and Viewing Reports

One of ProRep's primary means for providing management and supervision with information is through reports. Many different types of pre-defined reports are built into ProRep. Additionally, users can modify the pre-defined reports or create their own user-defined reports that focus on specific areas of interest.

Reports can be printed on paper or viewed on screen. They can also be saved as a Portable Document Format (PDF) file so that they can be shared with other people in the organization.

It would be nearly impossible to show an example of every report that ProRep can print. This chapter shows representative example reports as part of the report printing process. Chapter 3 "The Information ProRep Provides" shows many examples of both pre-defined and potential user-defined reports. However, the best way to become familiar with the reports that are available is by experimenting with the various selections and settings that are part of the report printing process.

Daily Production Reports

Each day, after the production and quality data is entered, the daily reports can be printed. If additions or corrections to the data are made, the reports can be reprinted.

Only the ProRep system operator or administrator can print an original copy of the production reports. However, when they print the report they can select that the report is written to disk as a PDF file. This PDF copy of the daily production reports can be viewed from within ProRep or by anyone who has the free Adobe Acrobat Reader. While viewing the report, the whole report or selected sections can be printed.

When the daily production data is posted, a final copy of the daily production reports are saved to a disk as a PDF file. The file is saved for several weeks. Therefore, a report from three weeks ago or longer can be viewed and printed.

Detailed Production Sheet Report

A separate detailed Production Sheet Report is printed for each work center. It lists all associates who worked in the work center. If an associate works in more than one work center they will appear on each work center's report.

SSI Southeastern Distribution Center

Detailed Production Sheet Report

Work Center: RCV - Receiving **Monday, September 25, 2000**

Associate	Associate Code	Activity Code	Team	Allocation Code	Document	Activity Element		Units	Stop Time	Actual Hours	Earned Hours	Perf.
Washington, Joe	C90041	@CLOCKIN				Clock-In			07:30			
		RCON	2			Receive Consolidated		0	09:25	1.92	1.72	90%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	11:15	1.58	1.39	88%
		@LUNCH				Lunch				0.50		
		RCC	2			Receive Common Carrier		0	01:00	1.25	1.37	110%
		RCC	1			Receive Common Carrier		0	01:40	0.67	0.58	88%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	03:40	1.75	1.53	88%
		PUT		PI		Put Away		7	04:00	0.33	0.31	94%
						Pallets	7					
										8.00	6.91	92%
Williams, Tom	T21223	RCC	2			Receive Common Carrier		0	02:30	1.50	1.65	110%
		BREAK				Break				0.25		
		RCC	1			Receive Common Carrier		0	03:50	1.08	0.95	88%
		PUT		ICP		Put Away		15	04:30	0.67	0.67	100%
						Pallets	15					
										3.50	3.27	101%
Woods, Mary	A13542	@CLOCKIN				Clock-In			07:30			
		RCON	2			Receive Consolidated		0	09:30	2.00	1.79	90%
		BREAK				Break				0.25		
		@LUNCH				Lunch				0.50		
		RCC	1			Receive Common Carrier		0	12:15	2.00	1.75	88%
		RCON	2			Receive Consolidated		0	01:45	1.50	1.34	90%
		BREAK				Break				0.25		
		PUT		CORE		Put Away		24	03:15	1.25	1.07	86%
						Pallets	24					
		RCON	2			Receive Consolidated		0	03:45	0.50	0.45	90%
		CLEAN				Cleanup			04:00	0.25		
		RCC	1	ACME		Receive Common Carrier		326	04:00	0.00	0.00	0%
						Shipments	5					
						Cartons	326					
		RCC	2	CBP		Receive Common Carrier		497	04:00	0.00	0.00	0%
						Shipments	6					
						Cartons	497					
		RCC	1	CORE		Receive Common Carrier		215	04:00	0.00	0.00	0%

ProRep - printed by ADMINSTRATOR on Acrobat PDFWriter Page: 1 Printed: 6/21/00 10:38

The Detailed Production Sheet Report lists the details of all activities performed by the associate. For each job that the associate performs, it shows the amount of time and performance. On the last line for each associate, it shows the total hours and performance for the day.

Production Summary Report

The Production Summary Reports consist of two parts. The first part is a separate one page summary for each work center. There is one line on the report for each associate that worked in the work center. If an associate works in more than one work center they will appear on each work center's report.

SSI Southeastern Distribution Center

Production Summary Report

Work Center: OF1 - Order Filling First Shift

Monday, September 25, 2000

		----- Performance -----				----- Actual Hours -----			----- Effectiveness -----			
Code	Name	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks	Total of All Work Centers
C11131	Baxter, Linda	86%	94%	91%	6.08	7.08	0.92	8.00	76%	81%	77%	8.00
A12456	Boggs, Charlie	94%	106%	104%	6.79	7.25	0.75	8.00	85%	97%	91%	8.00
C76354	Grubbs, John	94%	77%	78%	0.75	0.80	7.20	8.00	9%	66%	66%	8.00
T54566	Pugmire, Charles	85%	110%	104%	1.70	2.00	0.25	2.25	76%	94%	90%	8.00
A65657	Rockford, June	89%	95%	97%	5.09	5.75	2.25	8.00	64%	87%	88%	8.00
OF1	Order Filling First Shift	89%	95%	96%	20.42	22.88	11.37	34.25	60%	78%	81%	

The Production Summary Report lists the daily totals for each associate and the entire work center. It includes the total hours, performance and effectiveness. As a way of quickly determining if performance is improving it shows the last 6 weeks and last 52 weeks average performance.

The last page of the Production Summary Report list one line of total information for each work center and the total of all work centers.

SSI Southeastern Distribution Center

Production Summary Report

Total of All Work Centers

Monday, September 25, 2000

		----- Performance -----				----- Actual Hours -----			----- Effectiveness -----		
Code	Name	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks
RCV	Receiving	92%	96%	95%	16.59	18.00	1.50	19.50	85%	89%	87%
OF1	Order Filling First Shift	89%	95%	96%	20.42	22.88	11.37	34.25	60%	78%	81%
OF2	Order Filling Second Shift	90%	100%	100%	7.06	7.83	1.42	9.25	76%	89%	88%
SHIP1	Shipping First Shift	83%	90%	89%	11.72	14.08	1.42	15.50	76%	82%	82%
SHIP2	Shipping Second Shift	91%	101%	100%	5.36	5.92	0.83	6.75	79%	93%	92%
CSA	Customer Service & Admin.	93%	95%	94%	9.11	9.75	6.25	16.00	57%	86%	86%
TotalofAll	Total of All Work Centers	90%	97%	96%	70.25	78.47	22.78	101.25	69%	87%	87%

Hours Audit Report

The Hours Audit Report lists one line of information for each work center that an associate worked in along with a total for the entire day.

SSI Southeastern Distribution Center

Hours Audit Report

All Associates sorted by name

Monday, September 25, 2000

			Performance				Actual Hours			Effectiveness		
Code	Name	Work Center	Today	Last 6 weeks	Last 52 weeks	Earned Hours	Measured	Un-Measured	Total	Today	Last 6 weeks	Last 52 weeks
C11131	Baxter, Linda	Order Filling First Shift	86%	94%	91%	6.08	7.08	0.92	8.00	76%	81%	77%
C23433	Bell, William	Customer Service & Admin.	91%	88%	88%	4.87	5.33	2.67	8.00	61%	70%	73%
A12456	Boggs, Charlie	Order Filling First Shift	94%	106%	104%	6.79	7.25	0.75	8.00	85%	97%	91%
A21234	Carona, Maria	Customer Service & Admin.	96%	93%	97%	4.24	4.42	3.58	8.00	53%	85%	89%
C76354	Grubbs, John	Order Filling First Shift	94%	77%	78%	0.75	0.80	7.20	8.00	9%	66%	66%
A62215	Hanley, Ruth	Shipping First Shift	84%	90%	92%	4.21	5.00	0.25	5.25	80%	81%	84%
A39987	McGuire, Carter	Order Filling Second Shift	100%	91%	88%	3.01	3.00	0.75	3.75	80%	78%	76%
		Shipping Second Shift	102%	91%	88%	3.73	3.67	0.58	4.25	88%	78%	76%
		TOTAL	101%	91%	88%	6.74	6.67	1.33	8.00	84%	78%	76%
T54566	Pugmire, Charles	Order Filling First Shift	85%	110%	104%	1.70	2.00	0.25	2.25	76%	94%	90%
		Shipping First Shift	76%	110%	104%	3.66	4.83	0.92	5.75	64%	94%	90%
		TOTAL	79%	110%	104%	5.37	6.83	1.17	8.00	67%	94%	90%
A65657	Rockford, June	Order Filling First Shift	89%	95%	97%	5.09	5.75	2.25	8.00	64%	87%	88%
C29112	Stuckey, Alice	Order Filling Second Shift	84%	105%	108%	4.05	4.83	0.67	5.50	74%	87%	92%
		Shipping Second Shift	73%	105%	108%	1.63	2.25	0.25	2.50	65%	87%	92%
		TOTAL	80%	105%	108%	5.68	7.08	0.92	8.00	71%	87%	92%
C90041	Washington, Joe	Receiving	92%	91%	91%	6.91	7.50	0.50	8.00	86%	73%	72%
T21223	Williams, Tom	Receiving	101%	110%	112%	3.27	3.25	0.25	3.50	93%	99%	102%
		Shipping First Shift	91%	110%	112%	3.85	4.25	0.25	4.50	86%	99%	102%
		TOTAL	95%	110%	112%	7.12	7.50	0.50	8.00	89%	99%	102%
A13542	Woods, Mary	Receiving	88%	96%	95%	6.41	7.25	0.75	8.00	80%	85%	83%

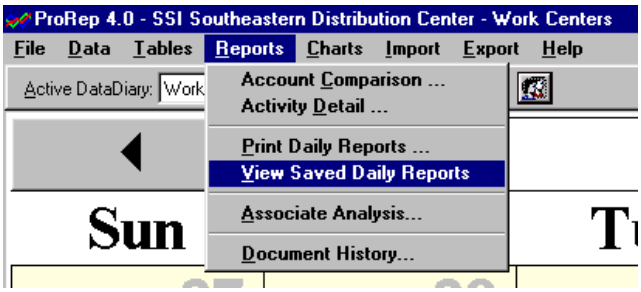
The following associates did not have any production information for any work centers:

Code	Name	Home Work Center
T43267	Gonzalez, Jose	Order Filling Second Shift
K92954	Stillwell, Yolanda	Shipping Second Shift

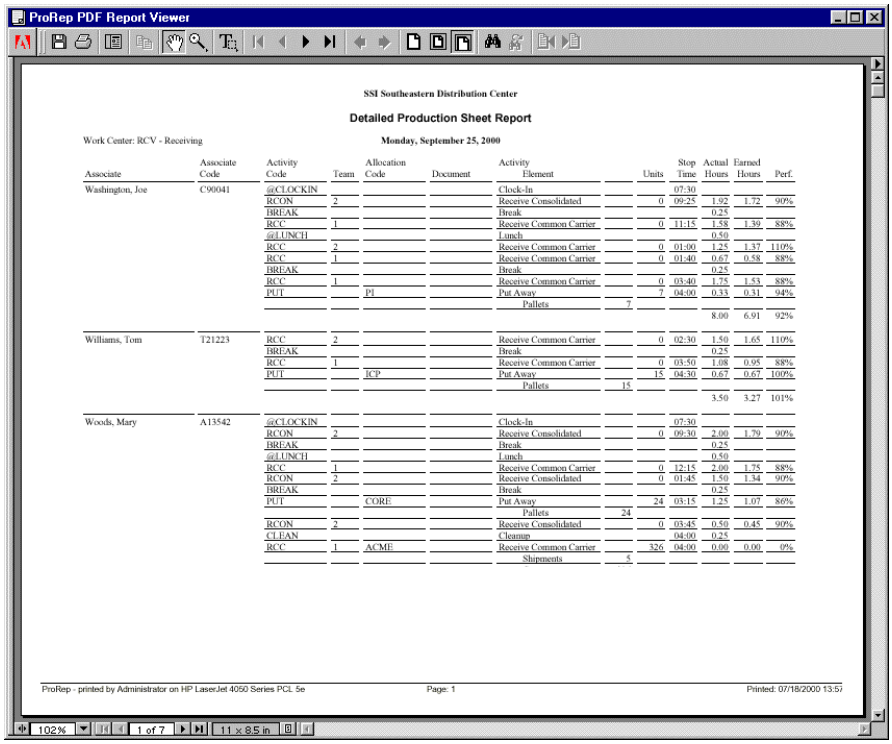
ProRep - printed by ADMINSTRATOR on Acrobat PDFWriter Page: 29 Printed: 6/21/00 10:38

Viewing Daily Production Reports

To view a days' production reports, click on the desired day on the desktop calendar, then from the menu bar select Reports, View Saved Daily Reports.



The PDF file containing the copy of the reports is opened and displayed on the screen.

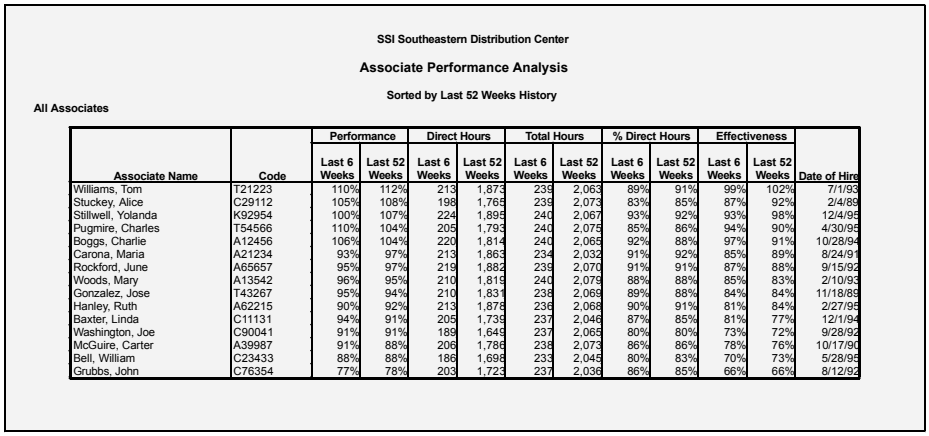

ProRep PDF Report Viewer
SSI Southeastern Distribution Center
Detailed Production Sheet Report
Work Center: RCV - Receiving
Monday, September 25, 2000
ProRep - printed by Administrator on HP LaserJet 4050 Series PCL 5e
Page: 1
102%
1 of 7
11 x 8.5 in

Associate Analysis

Associate analysis reports provide the capability to print associate reports that are sorted in high to low performance order. A single report can be printed that lists all associates in the ProRep system or separate reports can be printed by home work center or primary grouping.

Associate Performance Analysis

The Associate Performance Analysis shows each associates performance for both the last 6 weeks and last 52 weeks.



SSI Southeastern Distribution Center

Associate Performance Analysis

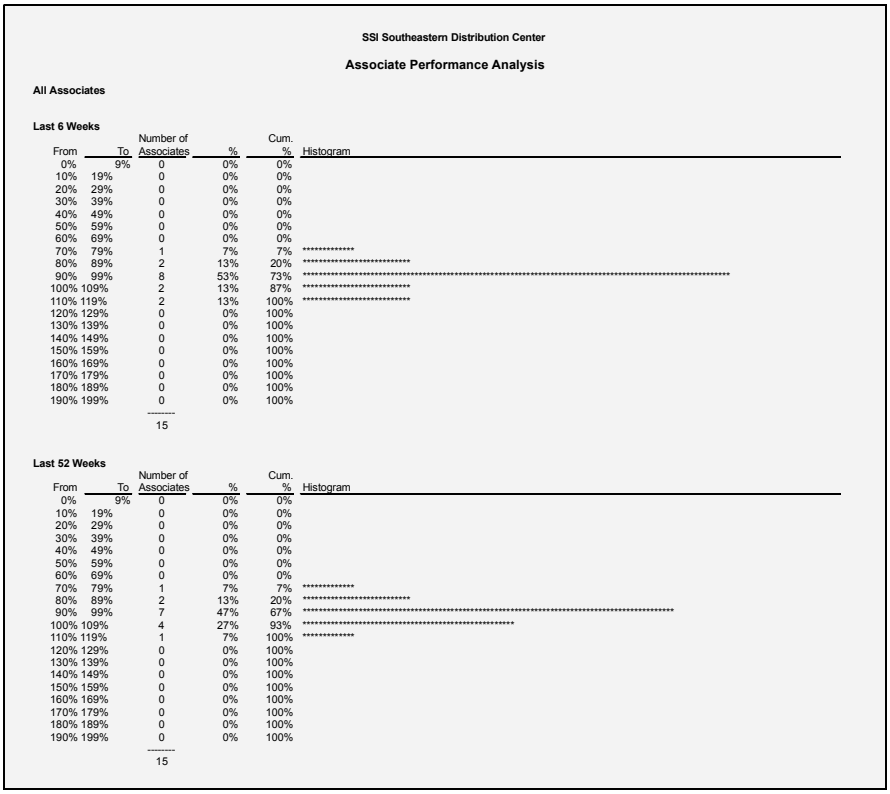
Sorted by Last 52 Weeks History

All Associates

Associate Name	Code	Performance		Direct Hours		Total Hours		% Direct Hours		Effectiveness		Date of Hire
		Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	
Williams, Tom	T21223	110%	112%	213	1,873	239	2,063	89%	91%	99%	102%	7/1/93
Stuckey, Alice	C29112	105%	108%	198	1,765	235	2,073	83%	85%	87%	92%	2/4/88
Stillwell, Yolanda	K92954	100%	107%	224	1,895	240	2,067	93%	92%	93%	98%	12/4/95
Pugmire, Charles	T54566	110%	104%	205	1,793	240	2,075	85%	86%	94%	90%	4/30/95
Boggs, Charlie	A12456	106%	104%	220	1,814	240	2,065	92%	88%	97%	91%	10/28/94
Carona, Maria	A21234	93%	97%	213	1,863	234	2,032	91%	92%	85%	89%	8/24/91
Rockford, June	A65657	95%	97%	219	1,882	239	2,070	91%	91%	87%	88%	9/15/92
Woods, Mary	A13542	96%	95%	210	1,819	240	2,079	88%	88%	85%	83%	2/10/93
Gonzalez, Jose	T43267	95%	94%	210	1,831	238	2,069	89%	88%	84%	84%	11/18/89
Hanley, Ruth	A62215	90%	92%	213	1,878	236	2,068	90%	91%	81%	84%	2/27/95
Baxter, Linda	C11131	94%	91%	205	1,739	237	2,046	87%	85%	81%	77%	12/1/94
Washington, Joe	C90041	91%	91%	189	1,649	237	2,065	80%	80%	73%	72%	9/28/92
McGuire, Carter	A39987	91%	88%	206	1,786	238	2,073	86%	86%	78%	76%	10/17/90
Bell, William	C23433	88%	88%	186	1,696	233	2,045	80%	83%	70%	73%	5/28/95
Grubbs, John	C76354	77%	78%	203	1,723	237	2,036	86%	85%	66%	66%	8/12/93

The report is sorted based on the last 52 weeks performance. It could have been sorted based on the last 6 weeks performance.

A histogram can also be printed that shows the spread and range of associate performances.



SSI Southeastern Distribution Center

Associate Performance Analysis

All Associates

Last 6 Weeks

From	To	Number of Associates	%	Cum. %	Histogram
0%	9%	0	0%	0%	
10%	19%	0	0%	0%	
20%	29%	0	0%	0%	
30%	39%	0	0%	0%	
40%	49%	0	0%	0%	
50%	59%	0	0%	0%	
60%	69%	0	0%	0%	
70%	79%	1	7%	7%	**********
80%	89%	2	13%	20%	**********
90%	99%	8	53%	73%	**********
100%	109%	2	13%	87%	**********
110%	119%	2	13%	100%	**********
120%	129%	0	0%	100%	
130%	139%	0	0%	100%	
140%	149%	0	0%	100%	
150%	159%	0	0%	100%	
160%	169%	0	0%	100%	
170%	179%	0	0%	100%	
180%	189%	0	0%	100%	
190%	199%	0	0%	100%	
		15			

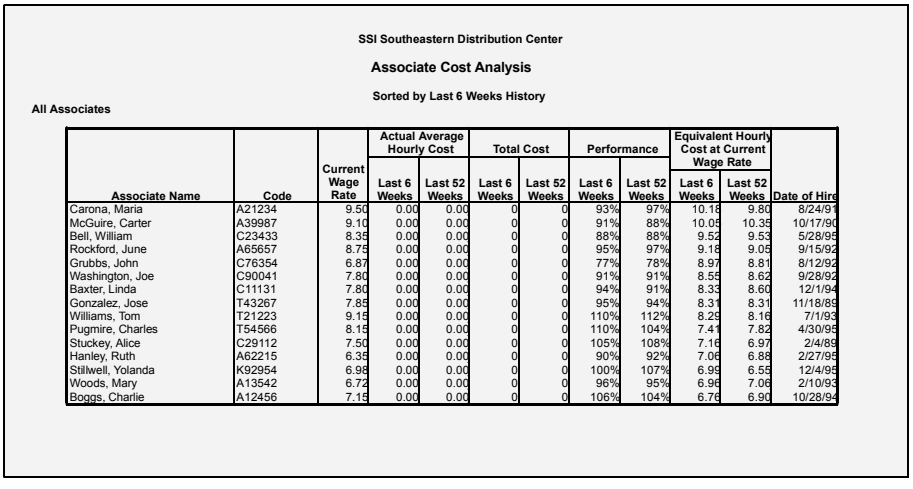
Last 52 Weeks

From	To	Number of Associates	%	Cum. %	Histogram
0%	9%	0	0%	0%	
10%	19%	0	0%	0%	
20%	29%	0	0%	0%	
30%	39%	0	0%	0%	
40%	49%	0	0%	0%	
50%	59%	0	0%	0%	
60%	69%	0	0%	0%	
70%	79%	1	7%	7%	**********
80%	89%	2	13%	20%	**********
90%	99%	7	47%	67%	**********
100%	109%	4	27%	93%	**********
110%	119%	1	7%	100%	**********
120%	129%	0	0%	100%	
130%	139%	0	0%	100%	
140%	149%	0	0%	100%	
150%	159%	0	0%	100%	
160%	169%	0	0%	100%	
170%	179%	0	0%	100%	
180%	189%	0	0%	100%	
190%	199%	0	0%	100%	
		15			

Histograms graphically show how an associate's performance compares to that of coworkers.

Associate Cost Analysis

The Associate Cost Analysis shows each associate's actual hourly cost along with their performance. It also shows their equivalent hourly cost which is calculated by dividing the actual hourly cost by their percent performance.



SSI Southeastern Distribution Center

Associate Cost Analysis

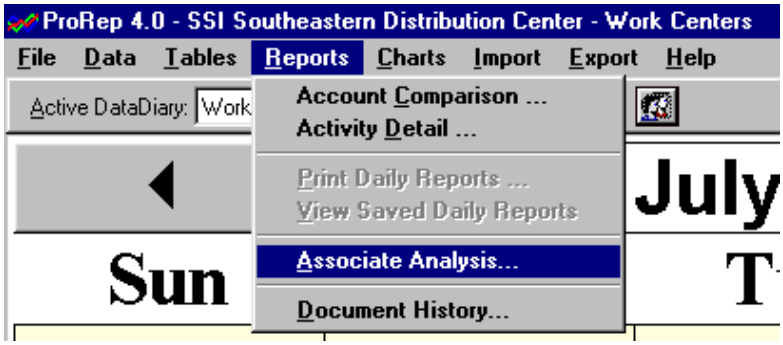
Sorted by Last 6 Weeks History

All Associates

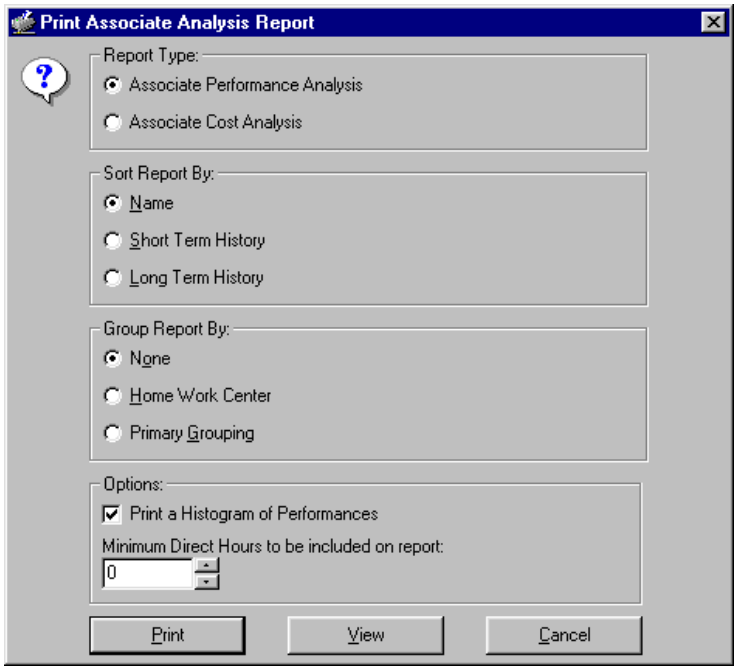
Associate Name	Code	Current Wage Rate	Actual Average Hourly Cost		Total Cost		Performance		Equivalent Hourly Cost at Current Wage Rate		Date of Hire
			Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	Last 6 Weeks	Last 52 Weeks	
Carona, Maria	A21234	9.50	0.00	0.00	0	0	93%	97%	10.18	9.80	8/24/91
McGuire, Carter	A39987	9.10	0.00	0.00	0	0	91%	88%	10.05	10.35	10/17/90
Bell, William	C23433	8.35	0.00	0.00	0	0	88%	88%	9.52	9.53	5/28/95
Rockford, June	A65657	8.75	0.00	0.00	0	0	95%	97%	9.18	9.05	9/15/92
Grubbs, John	C76354	6.87	0.00	0.00	0	0	77%	78%	8.97	8.81	8/12/92
Washington, Joe	C90041	7.80	0.00	0.00	0	0	91%	91%	8.55	8.62	9/28/93
Baxter, Linda	C11131	7.80	0.00	0.00	0	0	94%	91%	8.33	8.60	12/1/94
Gonzalez, Jose	T43267	7.85	0.00	0.00	0	0	95%	94%	8.31	8.31	11/18/89
Williams, Tom	T21223	9.15	0.00	0.00	0	0	110%	112%	8.29	8.16	7/1/93
Pugmire, Charles	T54566	8.15	0.00	0.00	0	0	110%	104%	7.41	7.82	4/30/95
Stuckey, Alice	C29112	7.50	0.00	0.00	0	0	105%	108%	7.16	6.97	2/4/89
Hanley, Ruth	A62215	6.35	0.00	0.00	0	0	90%	92%	7.06	6.88	2/27/95
Stillwell, Yolanda	K92954	6.98	0.00	0.00	0	0	100%	107%	6.99	6.55	12/4/95
Woods, Mary	A13542	6.72	0.00	0.00	0	0	96%	95%	6.96	7.06	2/10/93
Boggs, Charlie	A12456	7.15	0.00	0.00	0	0	106%	104%	6.76	6.90	10/28/94

The report is sorted on the last 6 weeks equivalent hourly cost.

To print an Associate Analysis Report, from the menu bar select Reports, Associate Analysis.



The print associate analysis report dialog box is displayed.



Select the type of analysis report to be printed, the order in which it is to be sorted, how the associates are to be grouped and whether to print a histogram.

To exclude new hires and other associate who may have only worked a few days, from the performance report and histogram, enter the desired minimum hours in the Minimum Measured Hours to be included box.

Account Comparison Time Series Reports

There are several pre-defined Account Comparison Reports built into ProRep. Additionally, users can modify the pre-defined reports or create their own user-defined reports.

There are four types of Account Comparison Reports. Three of these report types are *Time Series* reports. They list the results for an account or group on a day-by-day, week-by-week, or month-by-month basis.

Prints one account or group total per page.

The range of days shown on the report are selected at printing.

Each day is printed on a separate line.

Southeastern Distribution Center

Group: All Accounts

Receiving Volume Report This Year vs. Last Year

Week Ending: Saturday, December 12, 1998

Date	Receiving													
	Cartons												Cartons per Hour	
	Common Carrier			Consolidator			Small Shipments			Hours				
	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997
Sunday														
Monday	**2,821**	2,816	*0.2*	**937**	1,016	*-7.8*	**168**	146	*15.1*	**35**	38	*-9.0*	**142.7**	139.7
Tuesday	**3,322**	2,829	*17.4*	**1,252**	1,229	*1.9*	**126**	129	*-2.3*	**37**	39	*-4.6*	**153.4**	137.0
Wednesday	**3,357**	3,384	*-0.8*	**1,198**	1,156	*3.6*	**153**	130	*17.7*	**36**	43	*-15.6*	**155.9**	141.7
Thursday	**3,095**	3,107	*-0.4*	**978**	819	*19.4*	**141**	140	*0.7*	**34**	40	*-14.6*	**146.8**	134.9
Friday	**2,514**	3,014	*-16.6*	**1,158**	1,048	*10.5*	**186**	136	*36.8*	**33**	39	*-13.7*	**145.7**	143.2
Saturday														
	15,109	15,150	*-0.3*	**5,523**	5,268	*4.8*	**774**	681	*13.7*	**175**	198	*-11.6*	**149.2**	139.3

Account Comparison Report - Day-by-Day

Above is a day-by-day report. Each day's data is printed on a separate line. This style of report is useful when tracking changes over time. This report is typically printed for a week.

Prints one account or group total per page.

The range of weeks is selected at printing.

Each week is printed on a separate line.

Southeastern Distribution Center

Group: All Accounts

Receiving Volume Report This Year vs. Last Year

Fiscal Month: December - Ending: Saturday, January 02, 1999

Week Ending Date	Receiving													
	Cartons												Cartons per Hour	
	Common Carrier			Consolidator			Small Shipments			Hours				
	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997
12/05/1998	**14,963**	14,180	*5.5*	**5,477**	5,161	*6.1*	**816**	789	*3.4*	**176**	199	*-11.6*	**147.3**	139.5
12/12/1998	**15,109**	15,150	*-0.3*	**5,523**	5,268	*4.8*	**774**	681	*13.7*	**175**	198	*-11.6*	**149.2**	139.3
12/19/1998	**14,632**	13,354	*9.6*	**5,307**	4,987	*6.4*	**755**	698	*8.2*	**171**	185	*-7.8*	**149.3**	138.3
12/26/1998	**14,318**	12,779	*12.0*	**4,812**	4,647	*3.6*	**725**	694	*4.5*	**165**	181	*-8.9*	**147.4**	138.0
01/02/1999	**13,013**	13,479	*-3.5*	**4,996**	4,506	*10.9*	**724**	645	*12.2*	**161**	182	*-11.2*	**144.1**	136.4
	72,035	68,942	*4.5*	**26,115**	24,569	*6.3*	**3,794**	3,507	*8.2*	**848**	945	*-10.3*	**147.5**	138.4

Account Comparison Report - Week-by-Week

Above is a week-by-week report printed for the fiscal month of December, which contains 5 weeks. If this report were printed for a quarter, there would be 13 lines of data. If this report were printed for a year, there would be 52 lines of data.

Prints one account or group total per page.

The range of months is selected at printing.

Each month is printed on a separate line.

Southeastern Distribution Center

Group: All Accounts

Receiving Volume Report This Year vs. Last Year

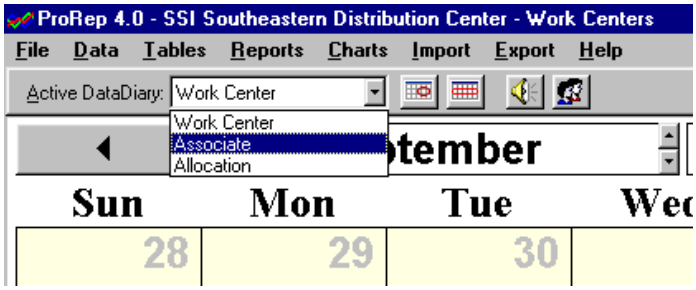
Year 1998 - Ending: Saturday, January 30, 1999

Period	Receiving													
	Cartons									Hours			Cartons per Hour	
	Common Carrier			Consolidator			Small Shipments							
	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997
February	**48,068**	47,501	*1.2*	**16,748**	16,243	*3.1*	**2,451**	2,372	*3.3*	**583**	664	*-12.3*	**142.1**	132.9
March	**72,722**	62,279	*16.8*	**24,624**	21,217	*16.1*	**3,534**	3,238	*9.1*	**840**	868	*-3.2*	**146.9**	134.7
April	**61,014**	46,195	*32.1*	**18,240**	16,766	*8.8*	**3,058**	2,552	*19.8*	**690**	668	*3.4*	**146.4**	133.1
May	**42,931**	50,531	*-15.0*	**17,748**	19,750	*-10.1*	**2,605**	2,891	*-9.9*	**558**	724	*-23.0*	**141.9**	136.6
June	**64,540**	70,057	*-7.9*	**21,864**	25,772	*-15.2*	**3,418**	3,602	*-5.1*	**766**	958	*-20.1*	**144.0**	140.0
July	**30,890**	38,243	*-19.2*	**13,249**	13,937	*-4.9*	**1,919**	2,060	*-6.8*	**429**	567	*-24.3*	**134.6**	129.5
August	**36,793**	34,019	*8.2*	**16,969**	12,736	*33.2*	**2,468**	2,219	*11.2*	**517**	539	*-4.0*	**139.9**	127.4
September	**78,571**	59,147	*32.8*	**25,275**	22,633	*11.7*	**4,158**	3,576	*16.3*	**896**	875	*2.3*	**148.4**	134.3
October	**76,287**	51,683	*47.6*	**23,865**	19,349	*23.3*	**3,213**	2,554	*25.8*	**807**	711	*13.4*	**153.8**	136.0
November	**70,917**	77,641	*-8.7*	**25,459**	23,992	*6.1*	**3,739**	2,701	*38.4*	**805**	889	*-9.5*	**154.4**	147.4
December	**72,035**	68,942	*4.5*	**26,115**	24,569	*6.3*	**3,794**	3,507	*8.2*	**848**	945	*-10.3*	**147.5**	138.4
January	**44,769**	44,662	*0.2*	**14,302**	17,415	*-17.9*	**2,481**	2,179	*13.9*	**543**	637	*-14.6*	**140.1**	133.4
	699,537	650,900	*7.5*	**244,458**	234,379	*4.3*	**36,838**	33,451	*10.1*	**8,282**	9,046	*-8.4*	**146.1**	136.1

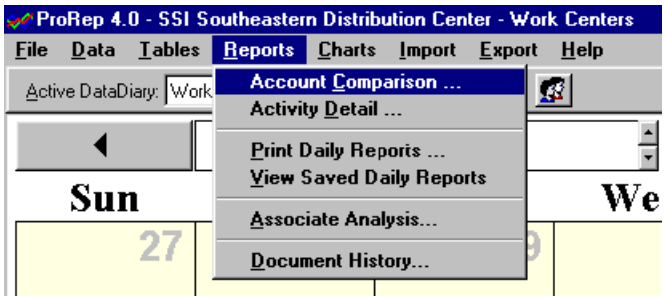
Account Comparison Report - Month-by-Month

Above is a month-by-month report. Each month or period's data is printed on a separate line. The above example has 12 lines, 1 for each month of the year.

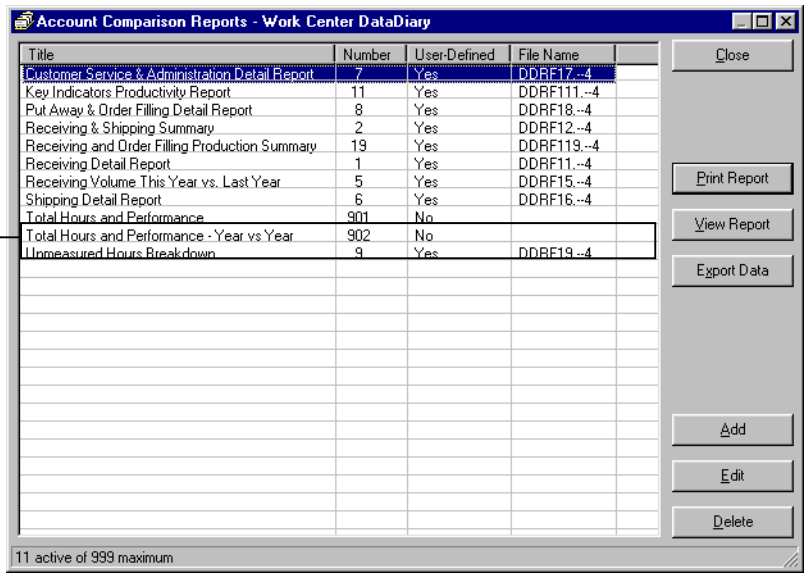
To print an Account Comparison report , select either the work center, associate, or allocation DataDiary.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
Work Center
Associate
Allocation
Sun Mon Tue
28 29 30

Then from the menu bar select Reports, Account Comparison.

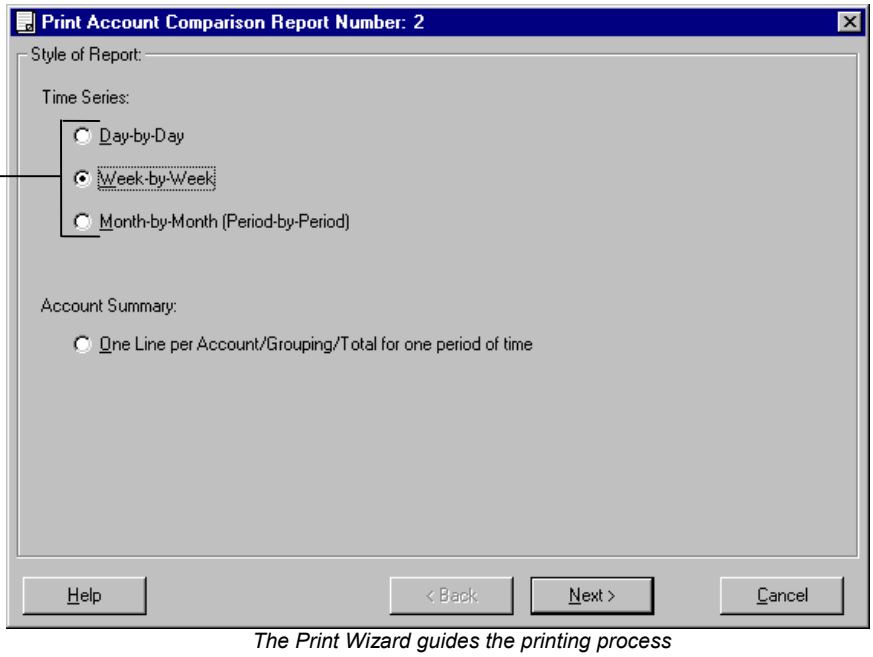


A list of both pre-defined and user-defined reports is displayed.


Account Comparison Reports - Work Center DataDiary
Title
Number
User-Defined
File Name
Customer Service & Administration Detail Report 7 Yes DDRF17.--4
Key Indicators Productivity Report 11 Yes DDRF111.--4
Put Away & Order Filling Detail Report 8 Yes DDRF18.--4
Receiving & Shipping Summary 2 Yes DDRF12.--4
Receiving and Order Filling Production Summary 19 Yes DDRF119.--4
Receiving Detail Report 1 Yes DDRF11.--4
Receiving Volume This Year vs. Last Year 5 Yes DDRF15.--4
Shipping Detail Report 6 Yes DDRF16.--4
Total Hours and Performance 901 No
Total Hours and Performance - Year vs Year 902 No
Unmeasured Hours Breakdown 9 Yes DDRF19.--4
Close
Print Report
View Report
Export Data
Add
Edit
Delete
11 active of 999 maximum

Pre-defined reports are identified by a No in the user defined column.

Highlight the report to be printed, by clicking on the report title, and select Print. This will activate the print wizard.

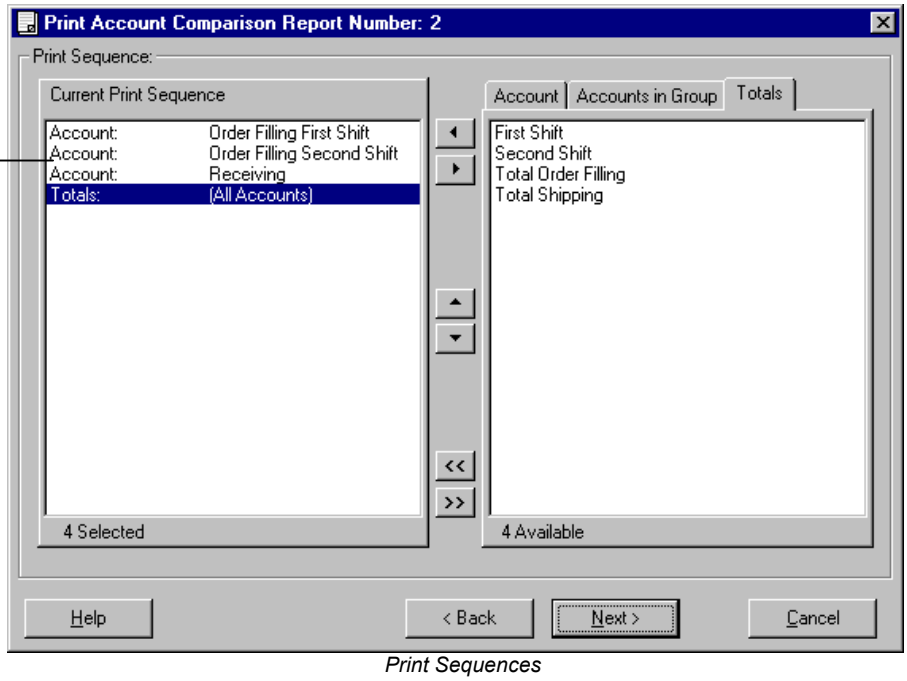


The three types of time series reports.

The Print Wizard guides the printing process

The amount of time to be printed on each line of the report is selected. A Day-by-Day report will print each day on a separate line. A Week-by-Week report prints a week total on each line. The Month-by-Month report prints a month total on each line. Click next to continue through the wizard.

This is the list of what will be printed.



Print Sequences

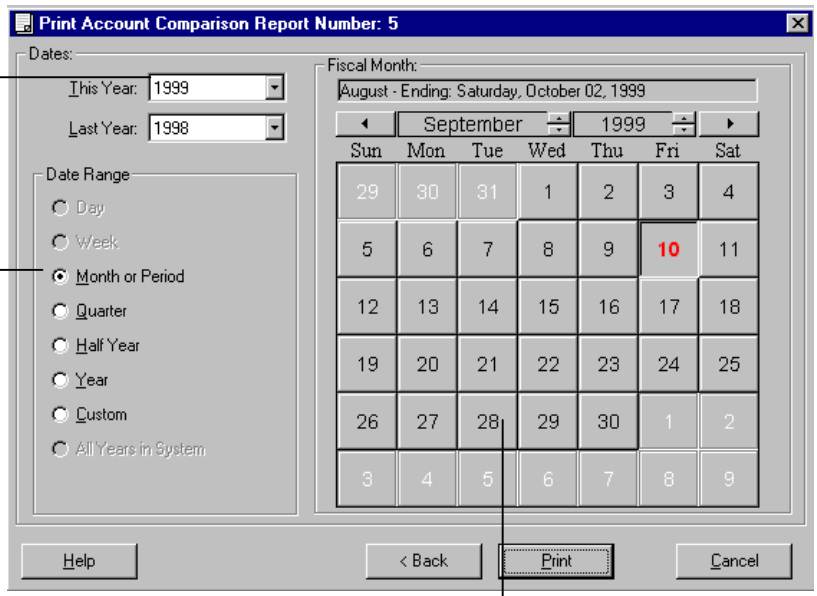
The list of print sequences on the left contains what will be printed. The list defaults to the print sequences defined in the report layout. The list can be modified.

The window on the right contains what is available to be printed. The right window contains tabs with Accounts, Groups of Accounts, Totals, and Separators. Items in both left and right lists can be transferred back and forth using the left and right arrow buttons between the windows.

The items in this list will be printed in the order in which they are listed. To change the order, an item can be moved up or down in the list by highlighting it and selecting the up or down buttons. Click Next to continue.

Select the year to print. Any year in the system can be used.

This report is being printed for a month, any range of dates can be used.



To select the month to be printed, click any day in that month.

Selecting the range of time to be printed is the last step in the print wizard. Reports can be printed for any date in the DataDiary. Click Print to print the report.

The above report is an example of an account comparison time series report. This particular report has sub-columns for comparing this year to last year and the percent change between the compared years.

Account Comparison One-Line Reports

A One Line report lists a one line total for each account or group for a specified period of time.

The amount of time covered by the report is selected at printing.

Account or group totals for the specified period of time.

SSI Southeastern Distribution Center

Unmeasured Hours Breakdown

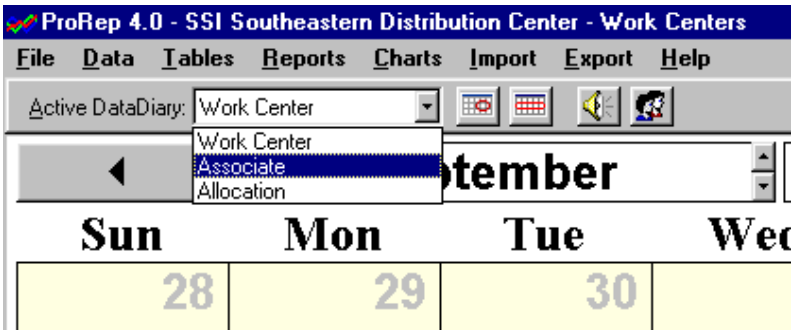
Year 1998 - Ending: Saturday, January 30, 1999

Account	Training	Meetings	Cleanup	Cycle Counting	Breaks	Total Unmeasured Hours	Total of All Hours	Percent of Total
Receiving	39.35	52.76	270.65		422.38	785.14	10,189.00	7.71
Order Filling First Shift	48.51	59.04	177.10	420.75	269.78	975.18	6,984.03	13.96
Shipping First Shift	36.79	37.05	117.78		171.85	363.47	4,186.04	8.68
Customer Service & Admin.	38.18	27.29	137.63		211.27	414.37	5,321.84	7.79
First Shift	162.83	176.14	703.16	420.75	1,075.28	2,538.16	26,680.91	9.51
Order Filling Second Shift	137.61	101.14	328.15	409.94	511.28	1,488.12	12,872.52	11.56
Shipping Second Shift	51.47	29.80	159.99		246.01	487.27	5,944.05	8.20
Second Shift	189.08	130.94	488.14	409.94	757.29	1,975.39	18,816.57	10.50
All Accounts	351.91	307.08	1,191.30	830.69	1,832.57	4,513.55	45,470.87	9.93

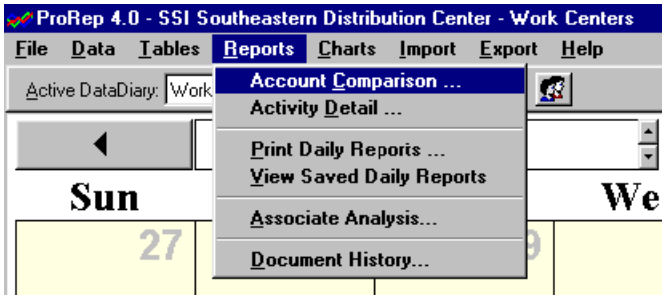
Account Comparison Report - One Line per Account

Above is a one line per account report. When the report is printed, the user is prompted for the amount of time to summarize and print on each line. In the example above, each line is a yearly total. Each line could have represented a day, a week, a quarter, a month, or any range of time.

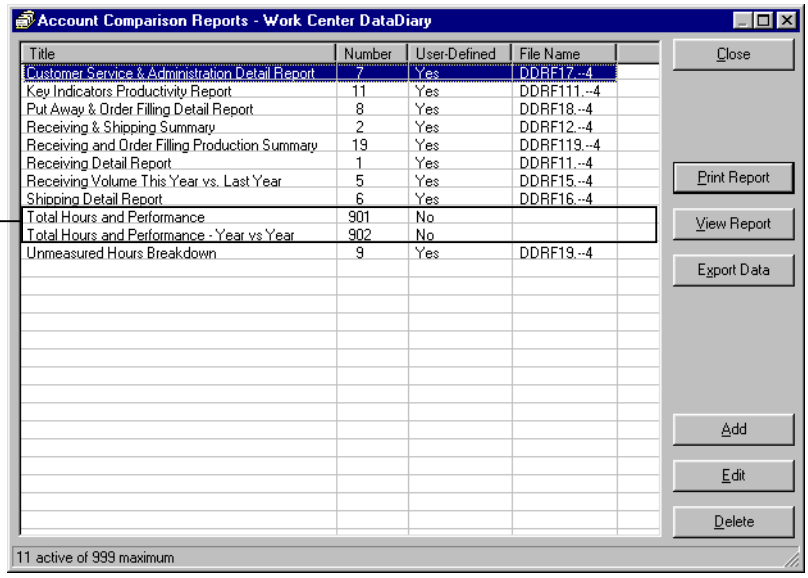
To print an Account Comparison report , select either the work center, associate, or allocation DataDiary.



Then from the menu bar select Reports, Account Comparison.

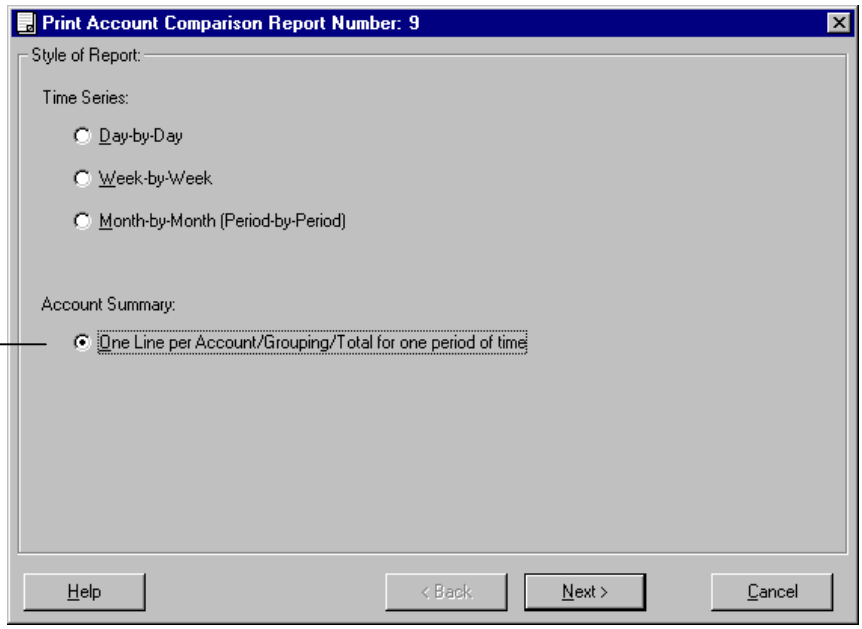


A list of both pre-defined and user-defined reports is displayed.


Account Comparison Reports - Work Center DataDiary
Title
Number
User-Defined
File Name
Customer Service & Administration Detail Report 7 Yes DDRF17.--4
Key Indicators Productivity Report 11 Yes DDRF111.--4
Put Away & Order Filling Detail Report 8 Yes DDRF18.--4
Receiving & Shipping Summary 2 Yes DDRF12.--4
Receiving and Order Filling Production Summary 19 Yes DDRF119.--4
Receiving Detail Report 1 Yes DDRF11.--4
Receiving Volume This Year vs. Last Year 5 Yes DDRF15.--4
Shipping Detail Report 6 Yes DDRF16.--4
Total Hours and Performance 901 No
Total Hours and Performance - Year vs Year 902 No
Unmeasured Hours Breakdown 9 Yes DDRF19.--4
Close
Print Report
View Report
Export Data
Add
Edit
Delete
11 active of 999 maximum

Pre-defined reports are identified by a No in the user defined column.

Highlight the report to be printed, by clicking on the report title, and select Print. This will activate the print wizard.

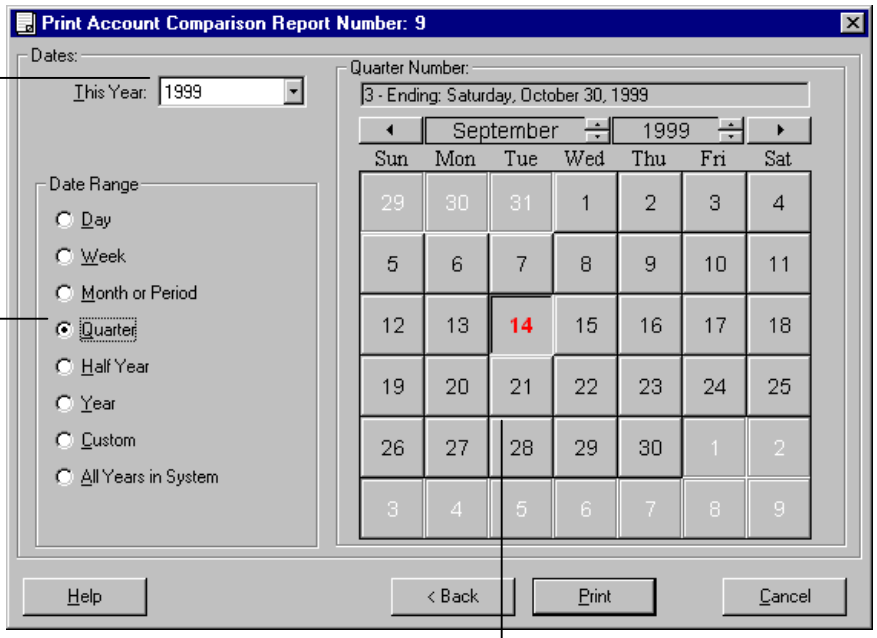


This selects the one line per account type of account comparison report.

Select One Line per Account/Grouping/Total for one period of time. Click Next to Continue.

Select the year to print. Any year in the system can be used.

This report is being printed for a quarter, any Range of dates can be used.



To select the quarter to be printed, click any day in that quarter.

Selecting the length of report is the last step in the print wizard. Reports can be printed for any date in the DataDiary. Click Print to print the report

Activity Detail Reports

Activity Detail reports list multiple activities for an account or group of accounts on a single report. Each activity is listed on a separate line. The Activity Detail report allows quick evaluation of performance and production data for many activities on a single report.

Each account or group is printed on a seperate page.

The amount of time covered by the report is selected at printing.

Each activity is printed on a seperate line.

SSI Southeastern Distribution Center

Group: (All Accounts)

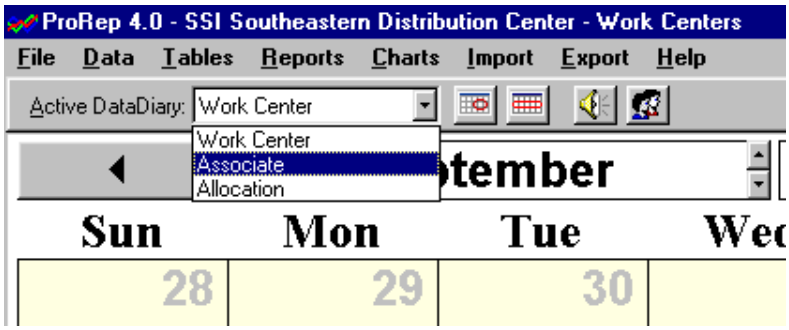
Performance & Productivity Summary

Day: Thursday, August 19, 1999

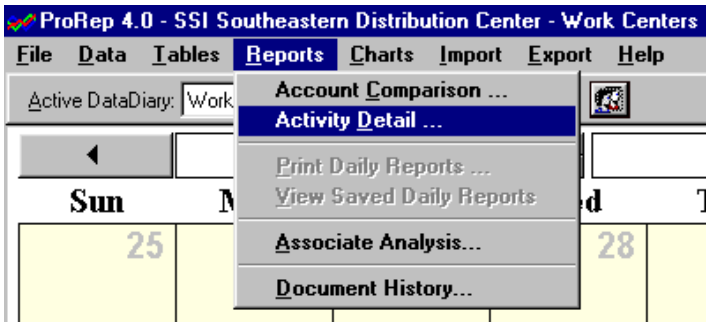
Description		Units Processed	Measured Hours	Non Measured Hours	Total Hours	Earned Hours	% Performance	Units Per Hour
Receive Common Carrier	Cartons	2,879	18.7		18.7	18.1	96.6	153.9
Receive Consolidator	Cartons	688	4.8		4.8	4.3	90.8	144.2
Receive Small Shipments	Cartons	164	7.6		7.6	7.5	97.8	21.5
Put Away	Pallets	90	4.2		4.2	4.0	95.0	21.3
Total Receiving	Cartons	3,731	35.4		35.4	33.9	95.9	105.5
Picking	Cartons	2,884	46.2		46.2	42.8	92.6	62.5
Haul to Shipping	Pallets	111	3.8		3.8	3.4	90.7	29.4
Total Order Filling	Cartons	2,995	50.0		50.0	46.2	92.5	59.9
Stage and Verify	Cartons	2,809	11.6		11.6	11.3	97.9	242.8
Loading	Cartons	3,072	15.9		15.9	14.7	92.6	193.1
Total Shipping	Cartons	5,881	27.5		27.5	26.1	94.9	214.0
Receipt Entry	Lines	159	2.9		2.9	3.1	105.5	55.0
Order Entry	Lines	1,485	8.5		8.5	8.4	99.6	175.7
Pick Adjustments	Lines	13	1.9		1.9	1.6	82.6	6.8
Total Customer Service & Administration		1,644	13.2		13.2	13.0	98.5	124.2
Cycle Counting	SKU's	39		4.8	4.8			
Meetings				2.5	2.5			
Traning								
Clean Up				4.2	4.2			
Total Non Measured		39		11.5	11.5			
Total of All Activities			126.0	11.5	137.5	119.2	94.6	

Above is an activity detail report. When the report is printed, the user is prompted for the range of time included in the report. In the example above, each line is a daily total. Each line could be a total for a week, a quarter, a month, year, or any range of time.

To print an Activity Detail report , select either the work center, associate, or allocation DataDiary as the active DataDiary.

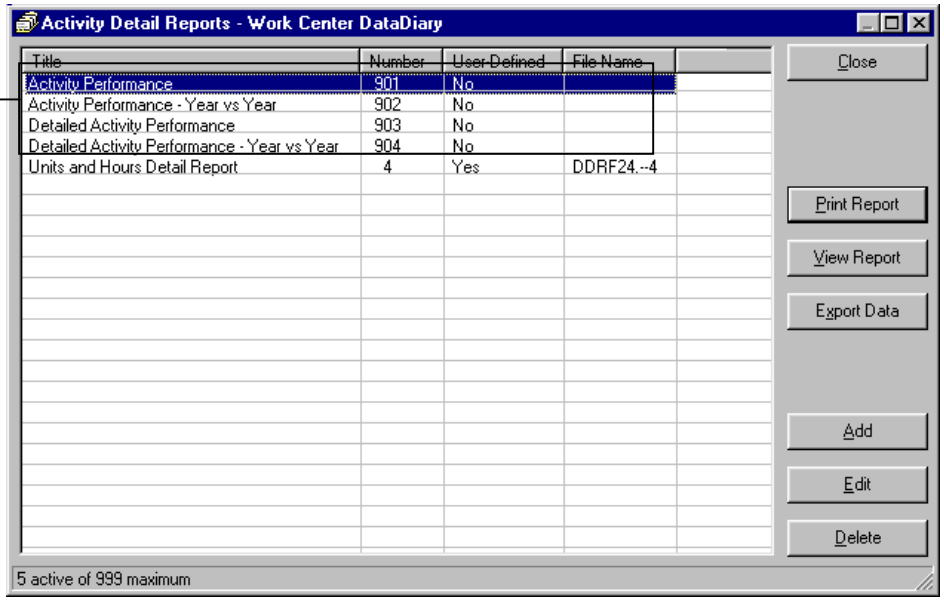

ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
Work Center
Associate
Allocation
Sun Mon Tue

Then from the menu bar select Reports, Activity Detail.

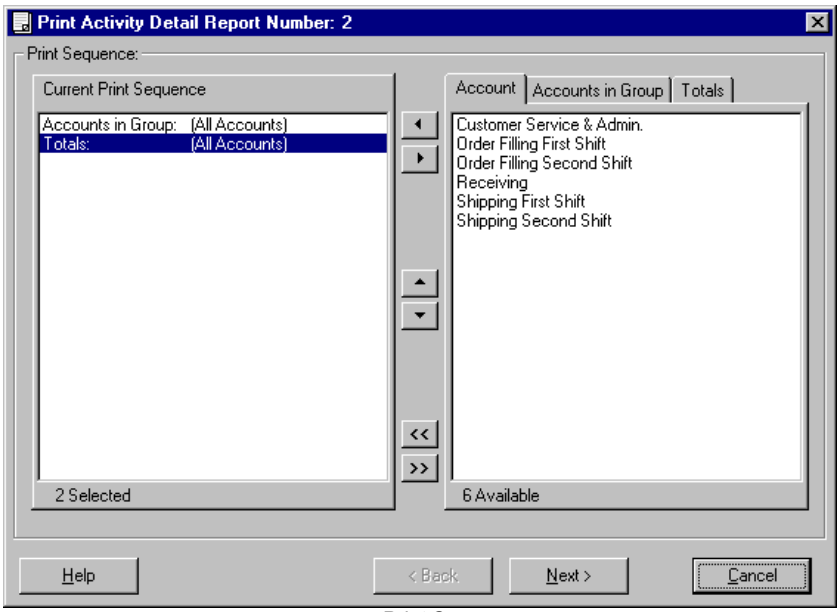


A list of both pre-defined and user-defined reports is displayed.

Pre-defined reports are identified by a No in the user defined column.



Highlight the report to be printed, by clicking on the report title, and select Print. This will activate the print wizard.

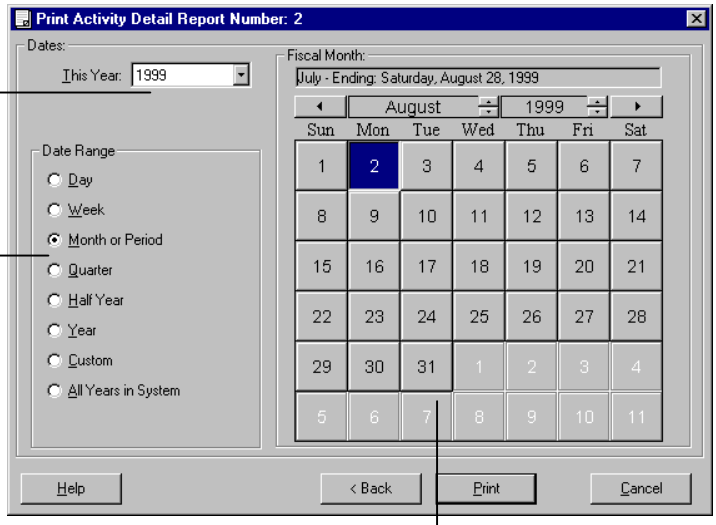


Print Sequences

The list of print sequences on the left contains what will be printed. The list defaults to the print sequences defined in the report layout. The list can be modified.

The window on the right contains what is available to be printed. The right window contains tabs for Account, Groups of Accounts, Totals, and Separators. Items in both left and right lists can be transferred back and forth using the left and right arrow buttons between the windows.

The items in this list will be printed in the order in which they are listed. To change the order, an item can be moved up or down in the list by highlighting it and selecting the up or down buttons.



Select the year to print. Any year in the system can be used.

This report is being printed for a month.

To select the month to be printed, click any day in that month.

Selecting the length of report is the last step in the print wizard. Reports can be printed for any date in the DataDiary. Click Print to print the report.

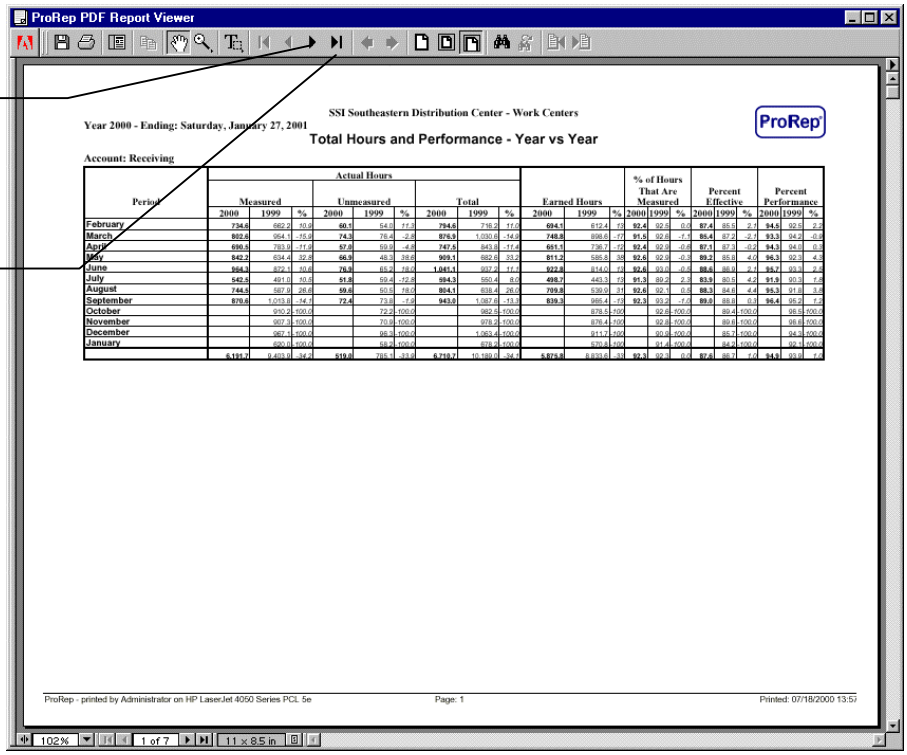
Viewing Reports

ProRep has a built in report viewing feature. This feature creates a PDF file and uses the Adobe Acrobat Reader which has been built into ProRep. The view wizard is identical to the print wizard except the report is displayed on screen.

In the ProRep PDF Viewer the report can be viewed, printed, or saved for future use.

This button advances the report on page at a time.

This button goes to the end of the PDF document.

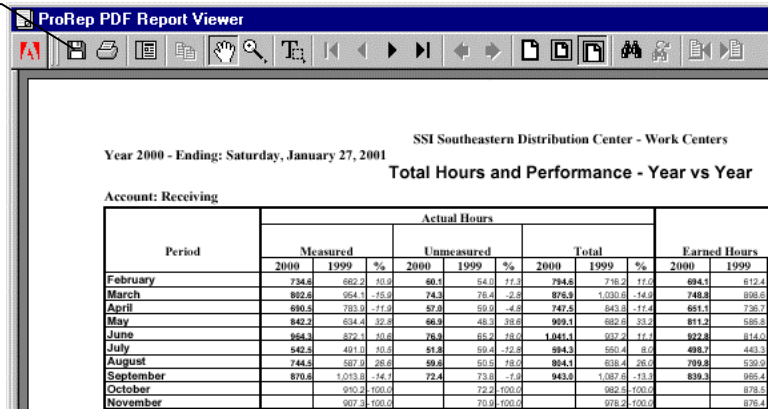


The button above the report provides controls such as zooming, panning, and searching for text. Place the cursor above each button for a pop up description of the buttons' functionality.

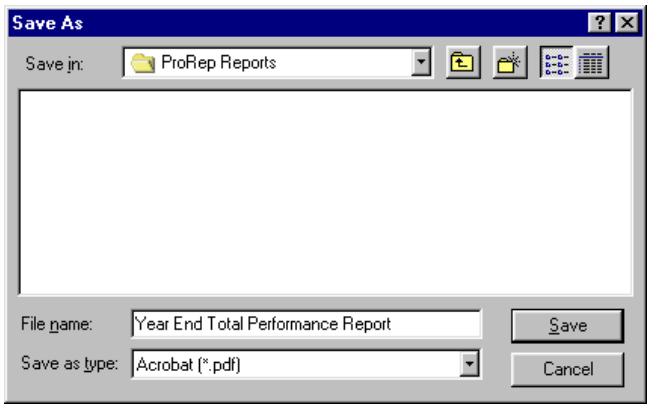
Distributing Reports

Report's can be distributed electronically by saving the report from the ProRep PDF Viewer. The report can then be viewed by anyone using Adobe's free Acrobat Reader.

Click the save button to save a report for electronic distribution.



This displays a dialog used to save the file.



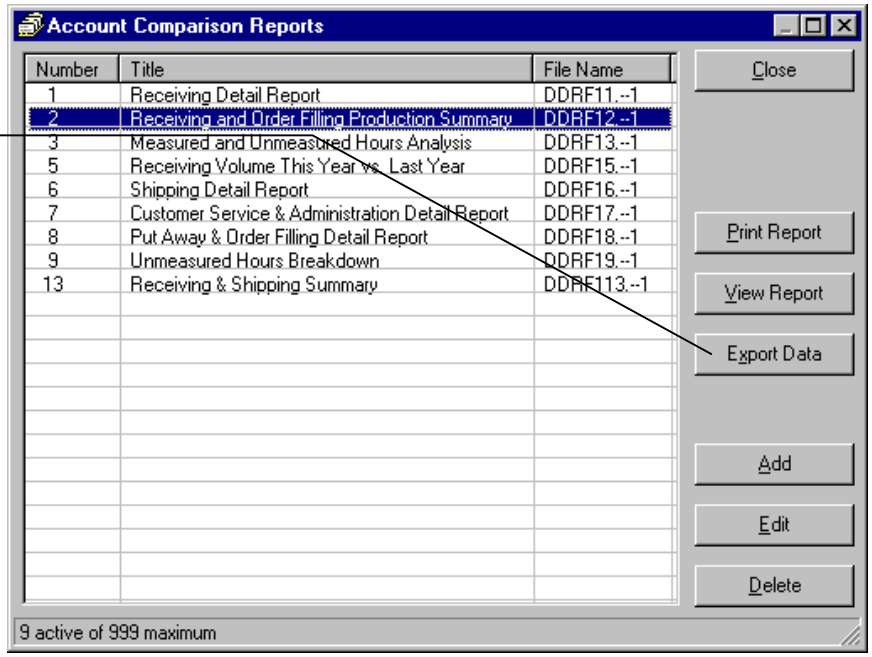
Select a folder and name for the file.

The PDF file can even be shared with others not running ProRep via the web, an intranet, e-mail, or a network.

Exporting Report Data

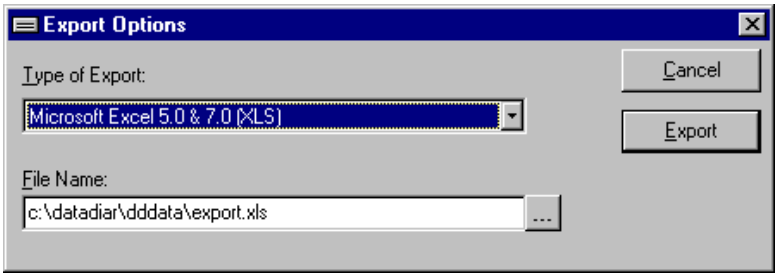
Account Comparison and Activity Detail reports can be exported to most spreadsheets and databases. Exporting a report is nearly identical to printing a report.

Click the Export Data button to create a report as a spreadsheet or database.


Account Comparison Reports
Number
Title
File Name
1 Receiving Detail Report DDRF11.--1
2 Receiving and Order Filling Production Summary DDRF12.--1
3 Measured and Unmeasured Hours Analysis DDRF13.--1
5 Receiving Volume This Year vs. Last Year DDRF15.--1
6 Shipping Detail Report DDRF16.--1
7 Customer Service & Administration Detail Report DDRF17.--1
8 Put Away & Order Filling Detail Report DDRF18.--1
9 Unmeasured Hours Breakdown DDRF19.--1
13 Receiving & Shipping Summary DDRF113.--1
Close
Print Report
View Report
Export Data
Add
Edit
Delete
9 active of 999 maximum

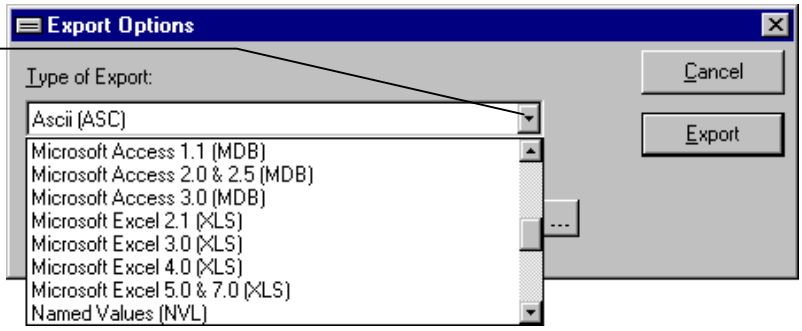
From the window that lists the user-defined Account Comparison or Activity Detail Reports, highlight the desired report and select the Export Data button.

The export wizard is displayed. This wizard is identical to the print wizard except that the last page of the wizard prompts for the file type and name.



ProRep can export a report to most popular spreadsheets and databases including Excel, Lotus, Access, and dBase.

The complete list of file types that can be created is displayed in the drop down list.



To complete the exporting process click the Export button. In this example we will creat an Excel spreadsheet. Below is the file opened in Excel.

Microsoft Excel - 0001.xls

File Edit View Insert Format Tools Data Window Help

Times New Roman 8

A1 Date_Type

	A	B	C	D	E	F	G	H
1	Date_Type	Date	AcctType	AcctDesc	Receiving Common Carrier Cartons	Receiving Common Carrier Hours	Receiving Common Carrier Cartons per Hour	Receiving Consol idator Cartons
2	Week Ending	06/05/99	Account	Order Filling First Shift	0	0.00	0.00	0
3	Week Ending	06/12/99	Account	Order Filling First Shift	0	0.00	0.00	0
4	Week Ending	06/19/99	Account	Order Filling First Shift	0	0.00	0.00	0
5	Week Ending	06/26/99	Account	Order Filling First Shift	0	0.00	0.00	0
6	Week Ending	07/03/99	Account	Order Filling First Shift	0	0.00	0.00	0
7	Week Ending	06/05/99	Account	Order Filling Second Shift	0	0.00	0.00	0
8	Week Ending	06/12/99	Account	Order Filling Second Shift	0	0.00	0.00	0
9	Week Ending	06/19/99	Account	Order Filling Second Shift	0	0.00	0.00	0
10	Week Ending	06/26/99	Account	Order Filling Second Shift	0	0.00	0.00	0
11	Week Ending	07/03/99	Account	Order Filling Second Shift	0	0.00	0.00	0
12	Week Ending	06/05/99	Account	Receiving	17423	114.19	152.58	5309
13	Week Ending	06/12/99	Account	Receiving	16055	107.01	150.03	4825
14	Week Ending	06/19/99	Account	Receiving	15329	105.30	145.57	4617
15	Week Ending	06/26/99	Account	Receiving	14512	97.99	148.10	4504
16	Week Ending	07/03/99	Account	Receiving	9437	70.04	134.74	3413
17	Week Ending	06/05/99	Group	(All Accounts)	17423	114.19	152.58	5309
18	Week Ending	06/12/99	Group	(All Accounts)	16055	107.01	150.03	4825
19	Week Ending	06/19/99	Group	(All Accounts)	15329	105.30	145.57	4617
20	Week Ending	06/26/99	Group	(All Accounts)	14512	97.99	148.10	4504

Table1

Ready Sum=0 NUM

Exported ProRep report opened in Microsoft Excel

The information in columns A through D provide information about the data an each line. This includes the date and account or group of the data on the line. Beginning in column E of the Excel spreadsheet are the columns of data from the ProRep report. Above each column is the column title as it appears on the ProRep report.

Chapter 14: Setting up User-Defined Formulas and Expressions

One of ProRep's most useful features is the ability to present data from the datafields in the DataDiary on user-defined reports and charts. The user specifies which datafields are used to produce the report or chart by including them in mathematical formulas. The formulas are part of the report or chart's layout

Formulas are defined independently on each user-defined report and chart. To eliminate the need to repeatedly define the same calculation, Expressions can be set up. Expressions are portable, reusable formulas defined separately from reports and charts. They can be used in the formulas on multiple reports and charts.

Formulas

Formulas are used as a definition of which datafields are to be extracted from the DataDiary. They also specify how the data should be mathematically manipulated. There are formulas that will calculate totals, units per hour, percentages and other calculations using DataDiary's datafields. The Formula setup is the same for any use in ProRep. Formulas are used in:

- User-Defined Reports
- User-Defined Charts
- Expressions

Formulas are defined in each of the above features of ProRep. There is no Menu Item for Formulas. How they are set up is nearly identical in all instances. The formula examples depicted in this chapter are shown through the setup of Expressions.

This is the only section of the manual that provides detailed information on the setup of Formulas. Therefore, it is necessary that the information provided in this chapter is understood before trying to create a user-defined report or chart.

Common Formulas

There are five types of common formulas available:

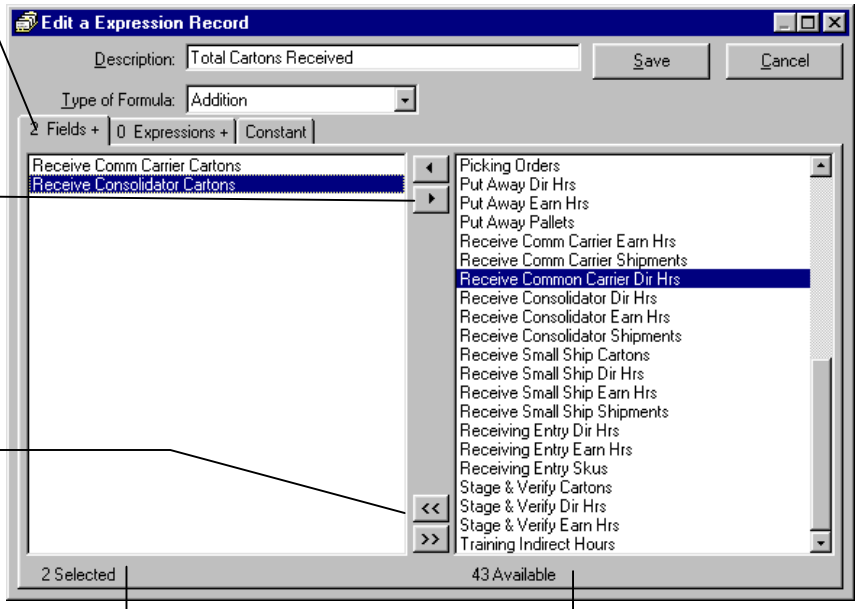
- Addition
- Subtraction
- Multiplication
- Division
- Percentage

The addition formula is used to create a sum of two or more datafields. The addition formula is also used if only one datafield, expression, or constant is to be included in a calculation. All formulas, regardless of where they are used in ProRep, have the same tabbed type interface shown below.

The tabs allow you to use expressions, fields and constants together in the same formula.

These Buttons move the highlighted object from one box to the other. The direction of the move is indicated by the arrow on the button.

These Buttons will move all items from one box to the other.



Items in the selected box will be added together.

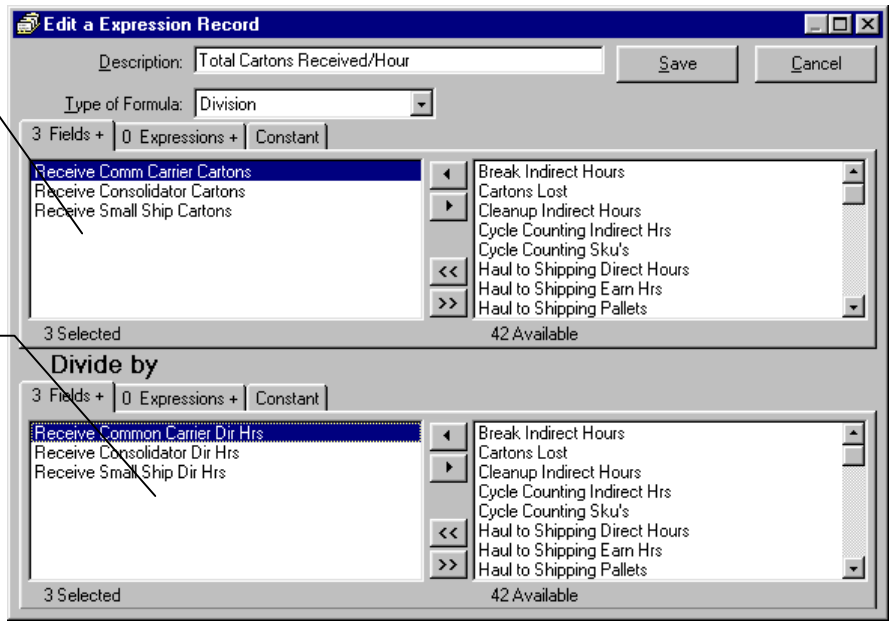
Items in the available box are the datafields that can be included in the formula.

Division, Multiplication, Percent, and Subtraction formulas have two sets of available and selected boxes.

We will use a division formula to demonstrate the functionality of these boxes. Division is commonly used to calculate ratios like units per hour. This formula calculates Total Cartons Received per Hour.

If you have more than one item in a selected box, the items within the box are added together before performing the desired operation such as division.

In this example, the total of the 3 datafields in the upper selected box will be divided by the total of the three datafields in this lower selected box.



ProRep will always add all the fields in the boxes first, then perform the desired operation (division).

The mathematical formula for the above example is:

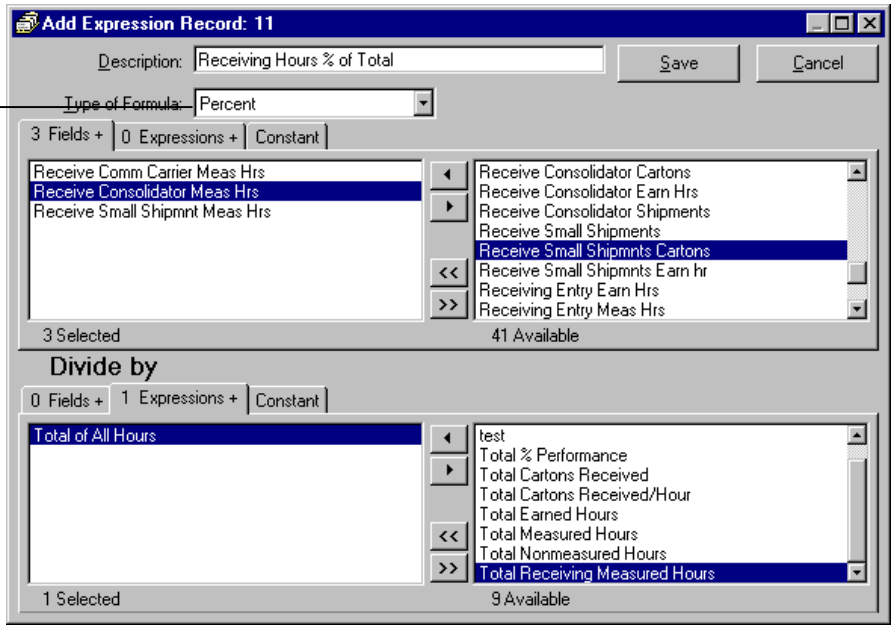
Total Cartons Received per Hour = (Receive Comm Carrier Cartons + Receive Consolidator Cartons + Receive Small Ship Cartons) / (Receive Common Carrier Dir Hrs + Receive Consolidator Dir Hrs + Receive Small Ship Dir Hrs)

Formulas can use expressions, fields, or constant numbers in any combination. The formulas used in reports and charts also allow you to include columns in the formula.

The above example is a division formula. Multiplication and subtraction work in the same manner.

Percentage formulas are nearly identical to division formula; however, ProRep will multiply the result of the division process by 100 to complete the operation.

The percentage formula divides the upper selected box by the lower selected box and then multiplies by 100.

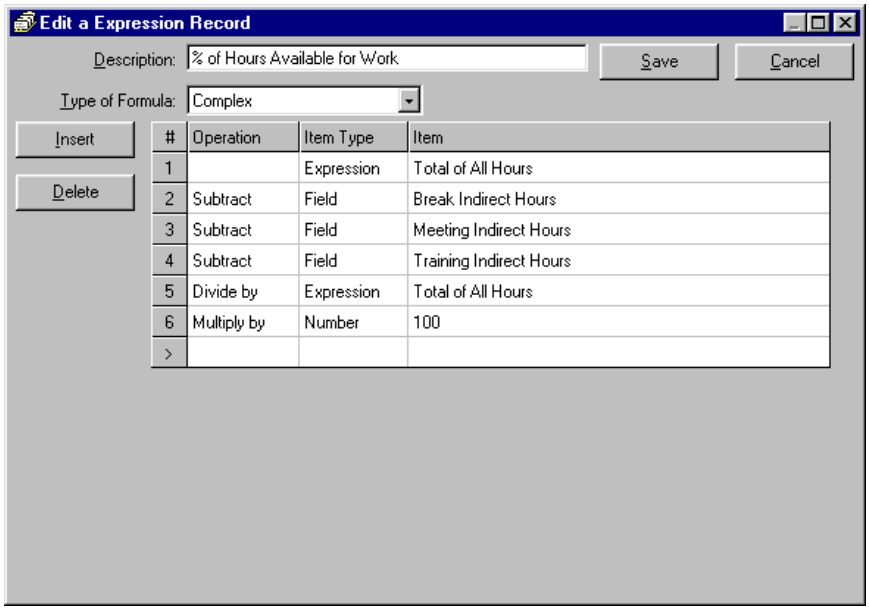


These common calculations should allow almost all ProRep users to complete any reporting, graphing, or monitoring desired.

Complex Formulas

Complex formulas are an advanced feature of ProRep most users will not need to use. A complex formula provides the ability to add, subtract, multiply, and divide all in the same formula. Complex formulas can be used to make obscure calculations. The following example calculates the percent of hours available for work.

A complex formula while not widely used can add, subtract, multiply, and divide in the same formula.


Edit a Expression Record
Description: % of Hours Available for Work
Save
Cancel
Type of Formula: Complex
Insert
Delete
| Operation | Item Type | Item
1 | | Expression | Total of All Hours
2 | Subtract | Field | Break Indirect Hours
3 | Subtract | Field | Meeting Indirect Hours
4 | Subtract | Field | Training Indirect Hours
5 | Divide by | Expression | Total of All Hours
6 | Multiply by | Number | 100

The mathematical formula for the above example is:

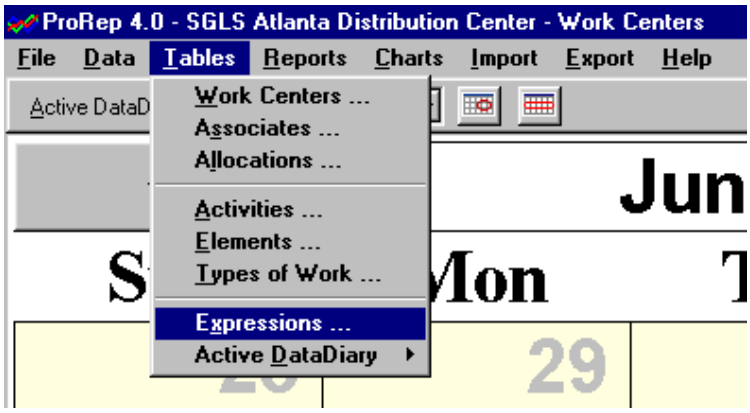
% of Hours Available for Work = (Total of All Hours - Break Indirect Hours - Meeting Indirect Hours - Training Indirect Hours) / Total of All Hours * 100

It is important to note that ProRep performs all addition and subtraction **before** multiplying and dividing.

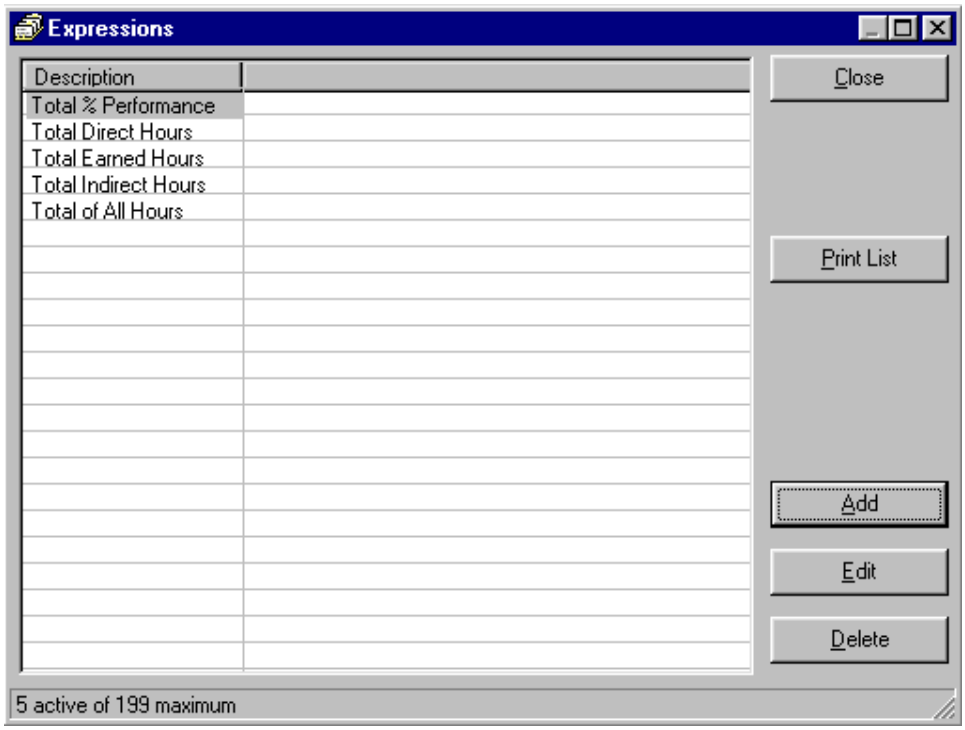
When you save a complex formula which ProRep can express as a common formula, it will automatically change the formula to its more simple form.

Expressions

Expressions are portable reusable formulas that can be used on any number of reports or charts. Expressions are global to the employee, work center and allocation DataDiaries. An understanding of formulas is required before attempting to define an expression. To set up an expression choose Expressions from the Table menu.



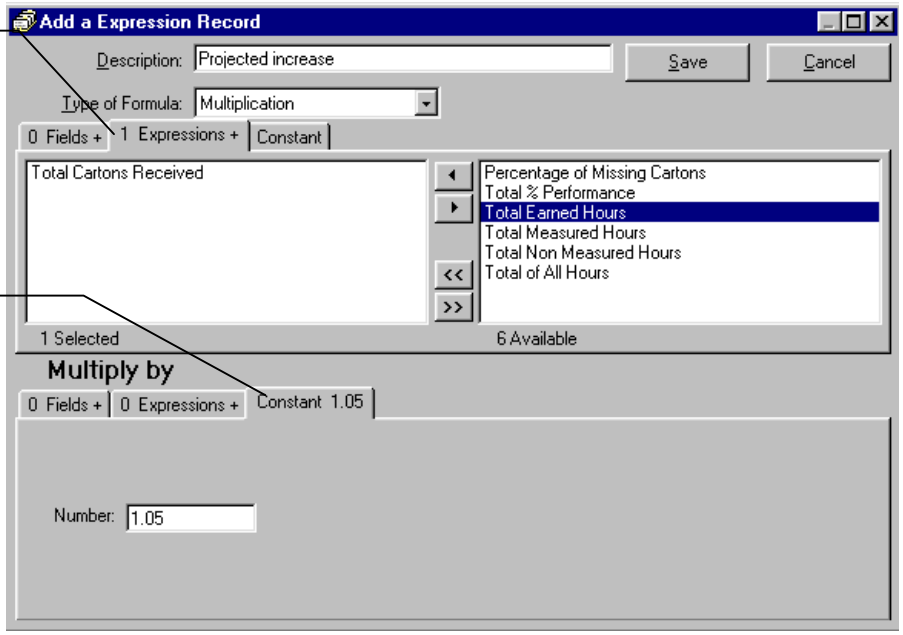
A list of previously defined expressions is displayed.



A list of currently defined expressions will appear. Add a new expression by clicking the Add button.

The Expressions tab also allows other expressions to be used when defining an expression.

The Constant tab shows the value of the constant number.



The expression setup interface is the same interface used in the previous section to demonstrate formulas. The expression is simply a formula. This example shows an Expression for the Projected cartons received. This expression uses another expression multiplied by a constant of 1.05 to calculate a 5% projected increase in cartons received.

Chapter 15: Modifying and Creating Report Layouts

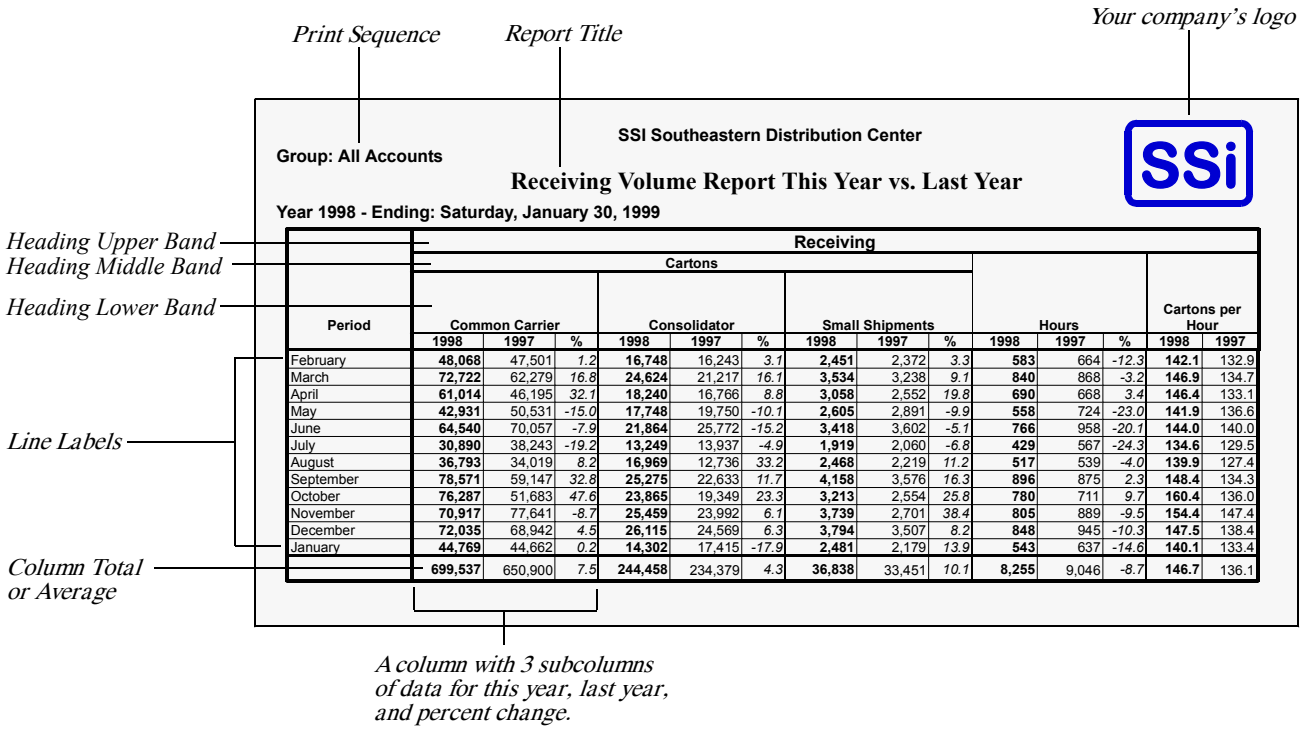
Each Account Comparison and Activity Detail Report has its own report layout file. The layout specifies what information is included on the report and how it should be formatted.

Many different types of pre-defined report layouts are built into ProRep These report layouts can be modified and saved as a user-defined report layout. Completely new report layouts can also be created.

Account Comparison Report Layouts

There are four types of Account Comparison Reports. Three of these report types are Time Series reports. They list the results for an account or group on a day-by-day, week-by-week, or month-by-month basis. The other type of report is a One Line per Account report. The same layout is used to print all account comparison report types.

Both Time Series and One Line Per Account report types are printed by using the same report layout. Below is an example of a month-by-month Account Comparison report that shows the major components that are defined in the layout.


Print Sequence
Report Title
Your company's logo
Group: All Accounts
SSI Southeastern Distribution Center
Receiving Volume Report This Year vs. Last Year
Year 1998 - Ending: Saturday, January 30, 1999
Heading Upper Band
Heading Middle Band
Heading Lower Band
Line Labels
Column Total or Average
A column with 3 subcolumns of data for this year, last year, and percent change.

Period	Receiving													
	Cartons												Cartons per Hour	
	Common Carrier			Consolidator			Small Shipments			Hours				
	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997
February	**48,068**	47,501	*1.2*	**16,748**	16,243	*3.1*	**2,451**	2,372	*3.3*	**583**	664	*-12.3*	**142.1**	132.9
March	**72,722**	62,279	*16.8*	**24,624**	21,217	*16.1*	**3,534**	3,238	*9.1*	**840**	868	*-3.2*	**146.9**	134.7
April	**61,014**	46,195	*32.1*	**18,240**	16,766	*8.8*	**3,058**	2,552	*19.8*	**690**	668	*3.4*	**146.4**	133.1
May	**42,931**	50,531	*-15.0*	**17,748**	19,750	*-10.1*	**2,605**	2,891	*-9.9*	**558**	724	*-23.0*	**141.9**	136.6
June	**64,540**	70,057	*-7.9*	**21,864**	25,772	*-15.2*	**3,418**	3,602	*-5.1*	**766**	958	*-20.1*	**144.0**	140.0
July	**30,890**	38,243	*-19.2*	**13,249**	13,937	*-4.9*	**1,919**	2,060	*-6.8*	**429**	567	*-24.3*	**134.6**	129.5
August	**36,793**	34,019	*8.2*	**16,969**	12,736	*33.2*	**2,468**	2,219	*11.2*	**517**	539	*-4.0*	**139.9**	127.4
September	**78,571**	59,147	*32.8*	**25,275**	22,633	*11.7*	**4,158**	3,576	*16.3*	**896**	875	*2.3*	**148.4**	134.3
October	**76,287**	51,683	*47.6*	**23,865**	19,349	*23.3*	**3,213**	2,554	*25.8*	**780**	711	*9.7*	**160.4**	136.0
November	**70,917**	77,641	*-8.7*	**25,459**	23,992	*6.1*	**3,739**	2,701	*38.4*	**805**	889	*-9.5*	**154.4**	147.4
December	**72,035**	68,942	*4.5*	**26,115**	24,569	*6.3*	**3,794**	3,507	*8.2*	**848**	945	*-10.3*	**147.5**	138.4
January	**44,769**	44,662	*0.2*	**14,302**	17,415	*-17.9*	**2,481**	2,179	*13.9*	**543**	637	*-14.6*	**140.1**	133.4
	699,537	650,900	*7.5*	**244,458**	234,379	*4.3*	**36,838**	33,451	*10.1*	**8,255**	9,046	*-8.7*	**146.7**	136.1

Heading - The heading of a report contains descriptive information for the data that is in the columns. In DataDiary, the heading consists of up to 3 different levels, called *bands*. The upper and middle bands can span multiple columns.

Line Labels - On this month-by-month report and other time series reports, the line labels are dates. On a one line report, the line labels are the names of the accounts and/or groups listed on the report.

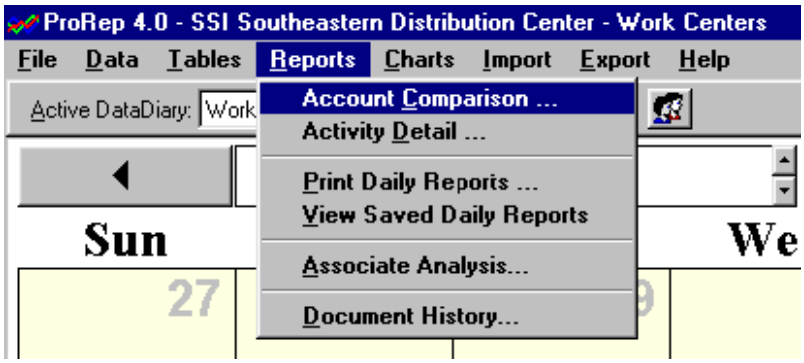
Columns - The first column on a report always contains the line labels which explain what the data on the line represents. After the first column, columns contain numerical information extracted from the DataDiary. A column can contain up to three *subcolumns*. The first subcolumn is always printed and contains the data for the current year. The second subcolumn is optional and contains the data for last year. The third subcolumn is also optional and contains the percent increase/decrease from last year.

Print Sequence - The list of groups and/or accounts that the report is printed for.

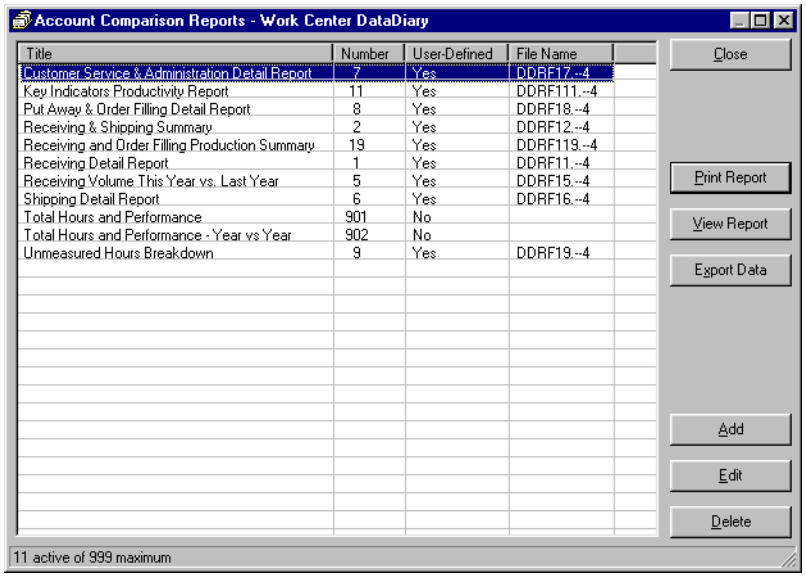
Column Total or Average - Either a total or an average of the numbers in the column can be printed on the last line of the report.

Adding a New Report

To setup a new account comparison report or edit an existing one, from the main menu, select **Report** and **Account Comparison**.



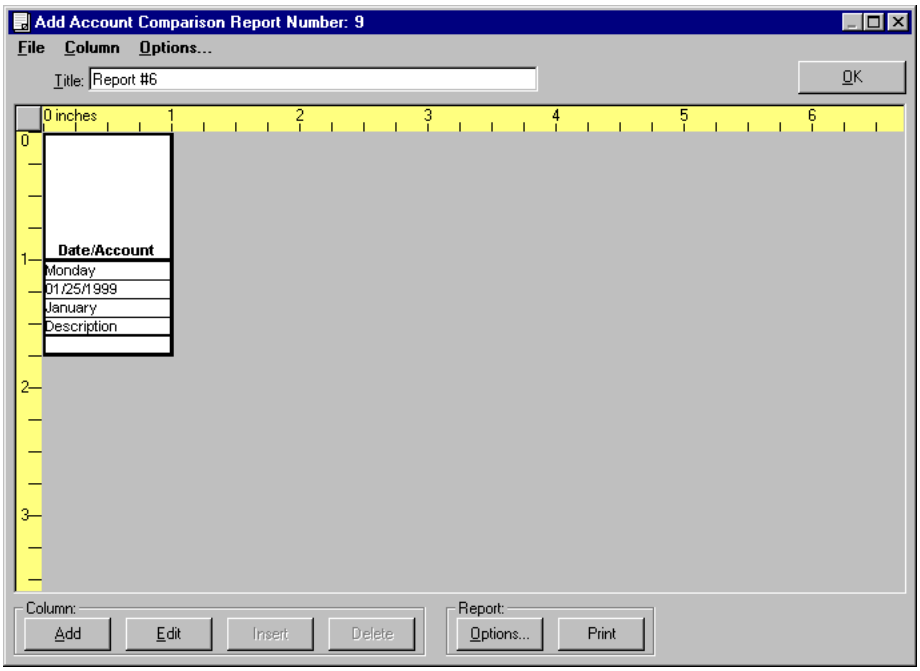
This displays a list of existing Account Comparison report layouts.


Account Comparison Reports - Work Center DataDiary
Title
Number
User-Defined
File Name
Customer Service & Administration Detail Report 7 Yes DDRF17.--4
Key Indicators Productivity Report 11 Yes DDRF111.--4
Put Away & Order Filling Detail Report 8 Yes DDRF18.--4
Receiving & Shipping Summary 2 Yes DDRF12.--4
Receiving and Order Filling Production Summary 19 Yes DDRF119.--4
Receiving Detail Report 1 Yes DDRF11.--4
Receiving Volume This Year vs. Last Year 5 Yes DDRF15.--4
Shipping Detail Report 6 Yes DDRF16.--4
Total Hours and Performance 901 No
Total Hours and Performance - Year vs Year 902 No
Unmeasured Hours Breakdown 9 Yes DDRF19.--4
Close
Print Report
View Report
Export Data
Add
Edit
Delete
11 active of 999 maximum

List of Account Comparison Report Layouts

Each report layout is stored in a separate file and is identified by a unique number. When the report is printed it will contain the title of the report as well as the report number. The title of the report can be changed, but the report number will always stay the same. The name of the file that contains the report layout is also shown in this window.

To add a new report, select the Add button. The report layout window is displayed.



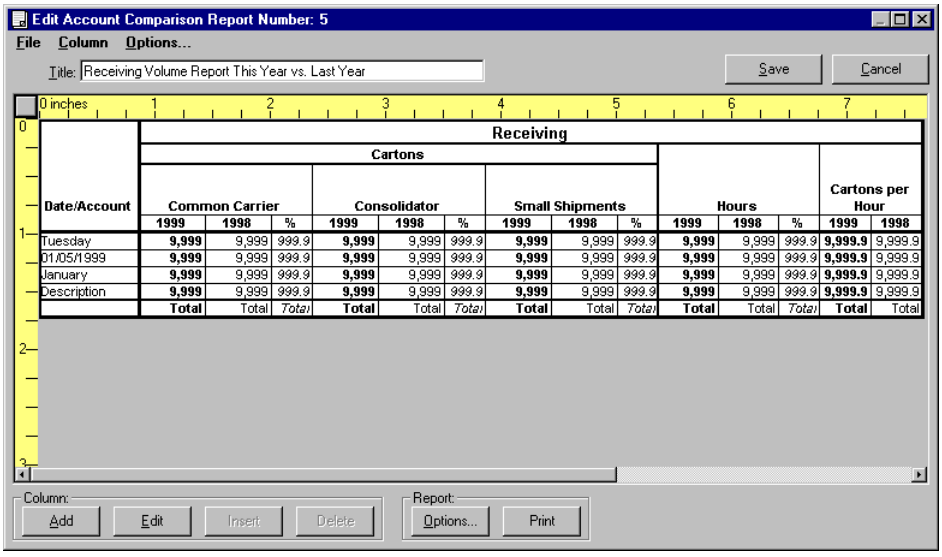
The first column of every account comparison report is a column that will contain line labels. When printed, this column will contain either a date or an account/group name.

Editing an Existing Report

To edit an existing report, highlight the report name and select Edit. In the following example, we will be editing an existing report.

Predefined reports can be edited. However, a modified pre-defined report must be saved as a new layout. To save changes to a pre-defined report, from the menu bar, select File, Save as New.

After selecting Edit, the report layout window is displayed.



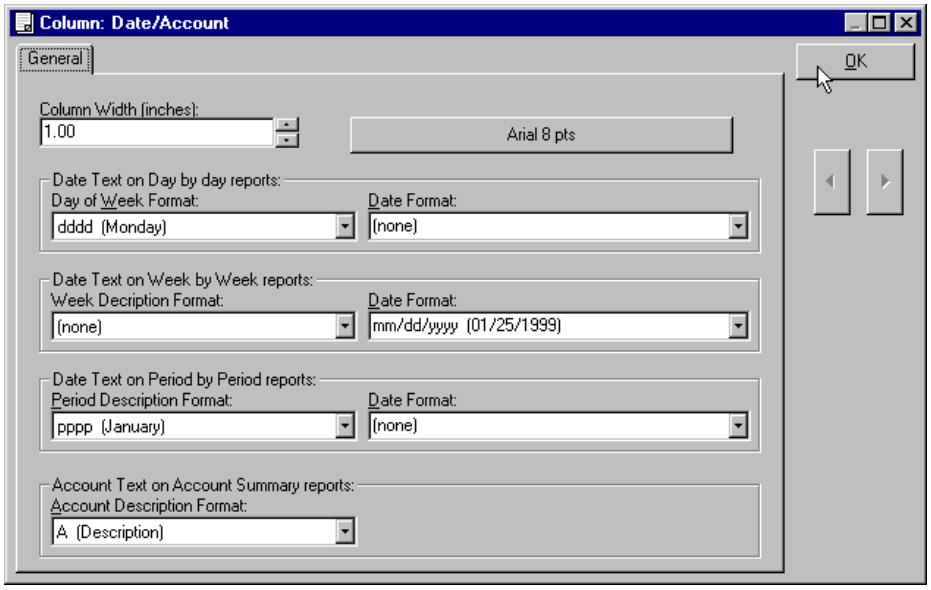
This is where you define columns, headings, summary lines, and other parts of the report.

Assigning a Report Title

The current report title is displayed at the top of the report layout window. Select the Title box to edit or change the title of the report. The title font can be changed by selecting Report Options, and selecting the Title Font button.

Modifying the First Column (Date/Account)

As mentioned above, the first column of every account comparison report is a column that will contain line labels. When printed, this column will contain either a date or an account/group name depending on the type of account comparison report selected. To make changes to the format of this column, either double-click on it, or highlight it and select the Edit button. This will display the Date/Account window:

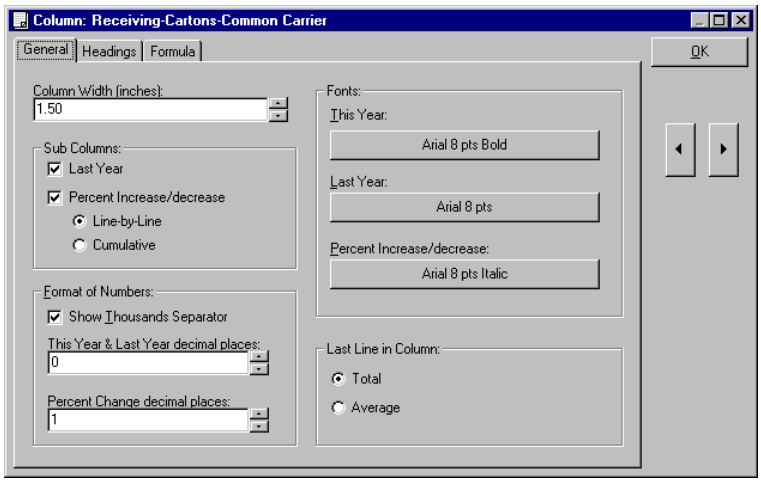


This window allows you to change the way dates are displayed. It also allows the user to select if the account codes and/or descriptions are shown on one line reports.

Adding or Editing a Column

To add a column to a report, from the report layout window, select the Add button.

To edit an existing column on a report, from the report layout window, either double click on the column, or highlight the column and from the report layout window, select the Edit button. This will display the column dialog.



Column General Tab

The general tab contains controls for the visual characteristics of a column.

Including Last Year's Data in a Column

By default, a column contains at least 1 subcolumn. This subcolumn will contain this year's data. To also include a subcolumn for last year's data, check the Last Year check box on the General tab.

Including a Percent Increase/Decrease in a Column

If last year's data is to be printed in a subcolumn, you can include a third subcolumn that will print the percent change. To include the percent change, check the Percent Increase/decrease check box on the General tab. You can choose whether the percent change is calculated line by line, or cumulatively.

Formatting Numbers in a Column

To include a thousands separator, check the Show Thousands Separator check box on the General tab. To specify the number of decimal places, enter the appropriate values in the This Year & Last Year and Percent Change decimal places box on the General tab.

Selecting the Fonts of Numbers in a Column

Each of the 3 possible subcolumns can be printed in different fonts. Selecting a font for a subcolumn will be applied to all subcolumns of this type on the report. If the font for This Year in column 5 is changed to 16 point Helvetica Bold, it will also be used for This Year data in all other columns. Change fonts by selecting the appropriate button in the Fonts section on the General tab

Specifying Column Totals or Averages

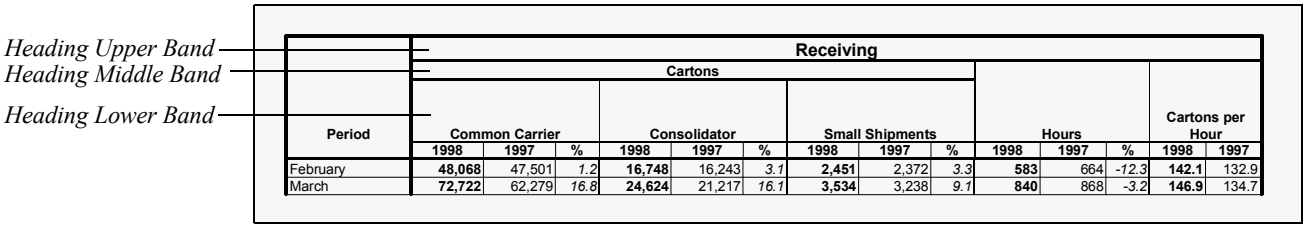
Either a total or an average of the numbers in the column can be printed on the last line of the report. Select the appropriate choice in the Last Line in Column section of the General tab.

Adjusting the Width of a Column

The column width can be changed by entering a value in the Column Width box on the General tab. The column width can also be changed by clicking either edge of the column and dragging the edge left or right with the mouse.

Building Column Headings

There are a maximum of 3 heading bands above each column that can contain text used as column headings.

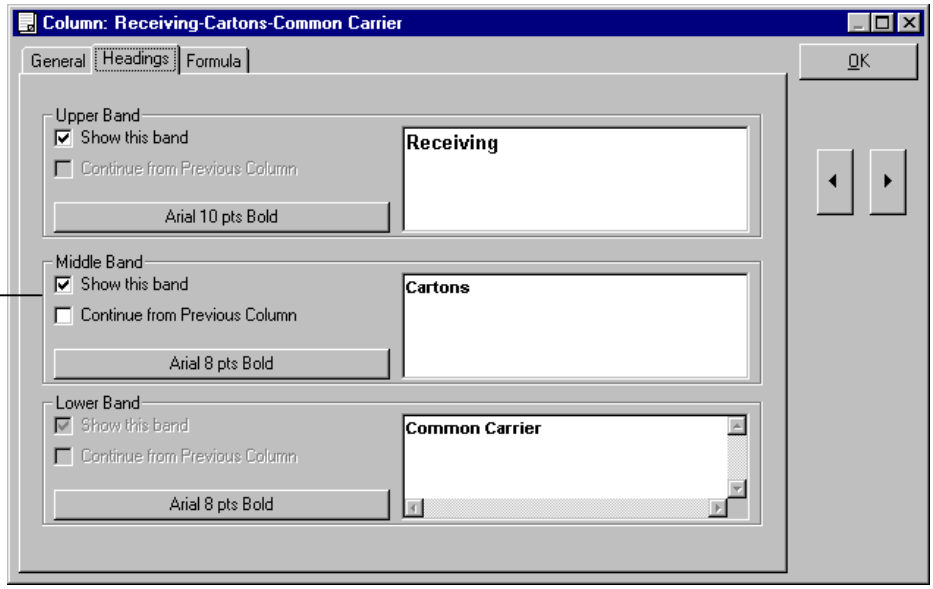


Period	Receiving													
	Cartons													
	Common Carrier			Consolidator			Small Shipments			Hours			Cartons per Hour	
	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997	%	1998	1997
February	**48,068**	47,501	*1.2*	**16,748**	16,243	*3.1*	**2,451**	2,372	*3.3*	**583**	664	*-12.3*	**142.1**	132.9
March	**72,722**	62,279	*16.8*	**24,624**	21,217	*16.1*	**3,534**	3,238	*9.1*	**840**	868	*-3.2*	**146.9**	134.7

On the report above, the Upper Band containing the word “Receiving” is continued from the Common Carrier column through the last column of the report. The Middle Band containing the word “Cartons” is continued from the Common Carrier column over the Consolidator and Small Shipment columns.

The second tab of the column layout window is the Heading tab.

Selecting this check box will center the text from the previous column above this column also.



Column Heading Tab

There is always a Lower Band. The Upper and Middle Bands are optional. Bands are intended to show a hierarchy of information on the report. Text on the Upper and Middle Bands can be centered over multiple columns.

Entering Text for a Column Heading

When a new column is added to a report the text of the lower band defaults to "Column *x*" and should be replaced. To enter text for the upper and lower bands, from the Heading tab, select the Show This Band check box and type in the desired heading. Note that the Middle Band cannot be enabled unless the Upper Band is enabled.

Changing a Column Heading's Font, Size, or Color

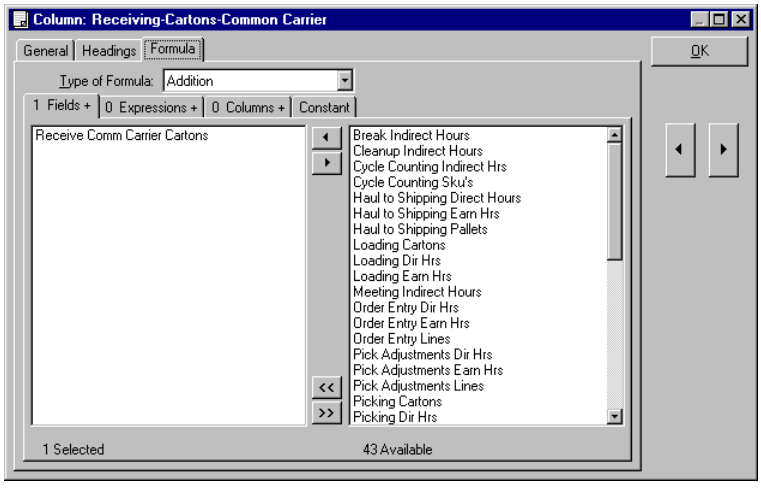
Each heading band also has its own font button, on the Heading tab which can be clicked to change a heading's font, size, and color. These selections affect the corresponding heading band in all columns on the report.

Centering a Column Heading Across Multiple Columns

There are two check boxes on the Headings tab provided for this purpose. The Show this Band check box determines if a particular band will be displayed for a column, while the Continue from Previous Column check box will carry the heading at that level from the previous column into the current column.

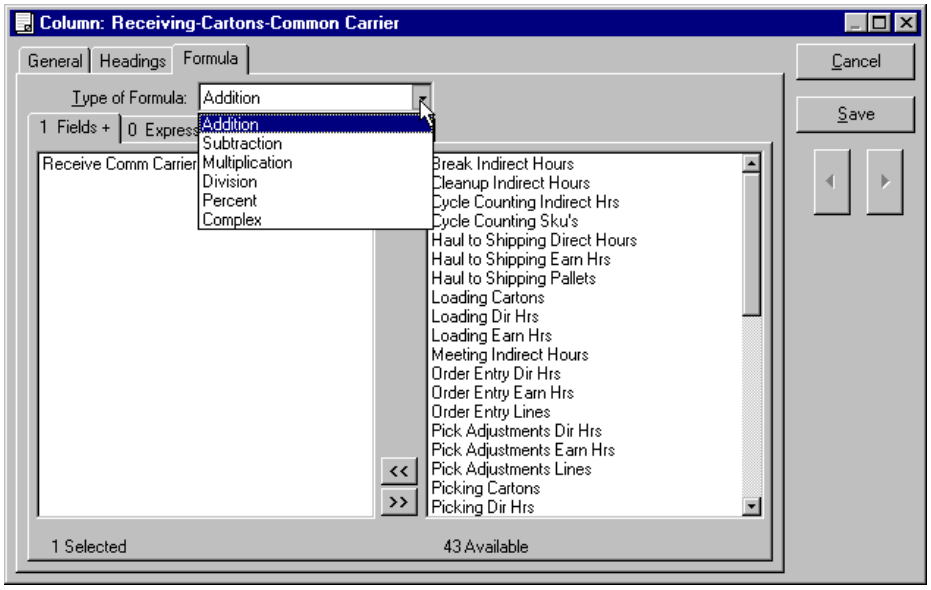
Selecting the Data to Appear in the Column

The data to be printed in a column is defined by setting up a formula on the Formula tab.



Column Formula Tab

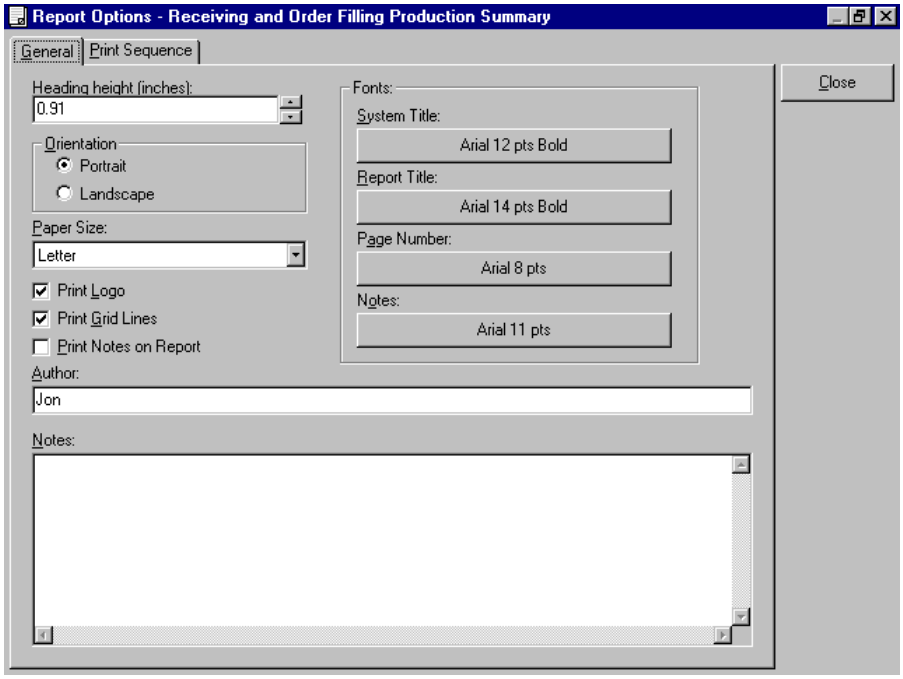
The first step in defining a formula is to click in the Type of Formula box on the Formula tab and select a mathematical operation from the drop down list.



After selecting the type of formula, datafields, expressions, and other columns can be included in the formula. See Chapter 14 “Setting up User-Defined” Formulas and Expressions for more information.

Report Options

Miscellaneous report properties such as paper orientation, additional notes, and title fonts are controlled from the Report Options window. You can access the Report Options window by selecting the Options menu option or button.



Report Options General Tab

Adjusting the Heading Height

To adjust the height of the heading change the value in the Heading Height box on the General tab. The heading height can also be adjusted using the mouse by clicking on the bottom edge of the heading and dragging the edge up or down with the mouse.

Selecting Paper Orientation

To toggle the paper orientation between portrait and landscape, click on the appropriate orientation radio button on the General tab.

Selecting Paper Size

To select the paper size on which to print the report, select a size from the Paper Size list on the General tab.

Printing a Logo on a Report

To include a logo on a report, select the Print Logo check box on the General tab. The logo file must be named LOGO.BMP, LOGO.WMF, or LOGO.GIF and it must be one of the following types: Windows Bitmap (.bmp), Windows Metafile (.wmf), or CompuServe GIF (.gif). The logo file must be in the directory where the ProRep program is installed.

Printing Grid Lines on a Report

To draw grid lines on a report, check the Print Grid Lines check box on the General tab.

Printing Notes on a Report

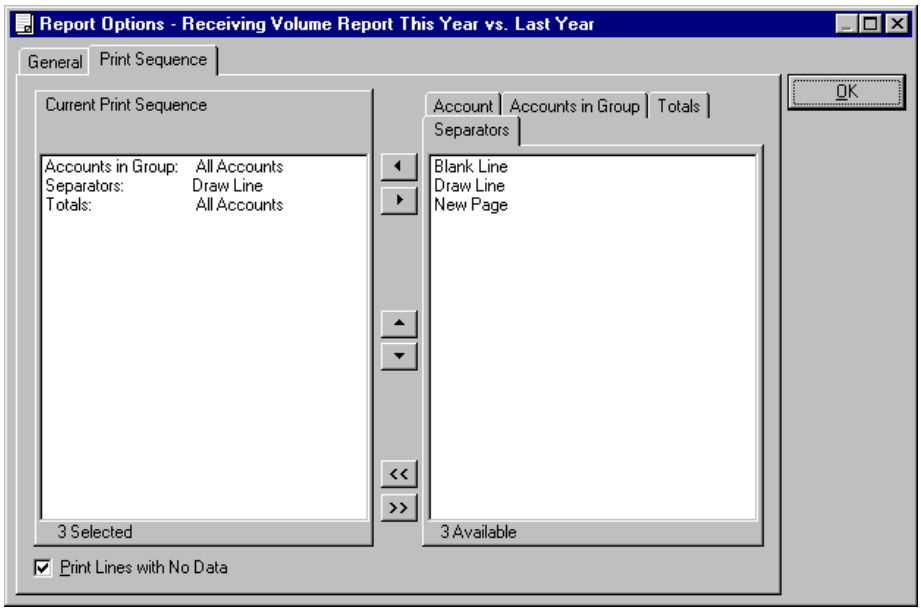
To print notes at the bottom of a Report, check the Print Notes on Report check box on the General Tab and enter the desired text into the Notes field.

Selecting the Accounts and Groups to be Printed

On time series reports like a week-by-week report, the default accounts and groups for which separate reports will be printed is controlled by the Print Sequences. When the report is printed, these accounts and groups will appear in the list of those to be printed as the defaults.

One line reports print one line of summary information for a specified time period for an account or group. The Print Sequences control which account or group is printed on each line. They also provide formatting capabilities such as drawing lines to indicate subtotals, and blank lines to visually separate major sections of a report. The account and groups cannot be changed in the printing process of one-line reports.

To change the print sequences, from the Report Options window, select the Print Sequences tab.



Report Options Print Sequences Tab

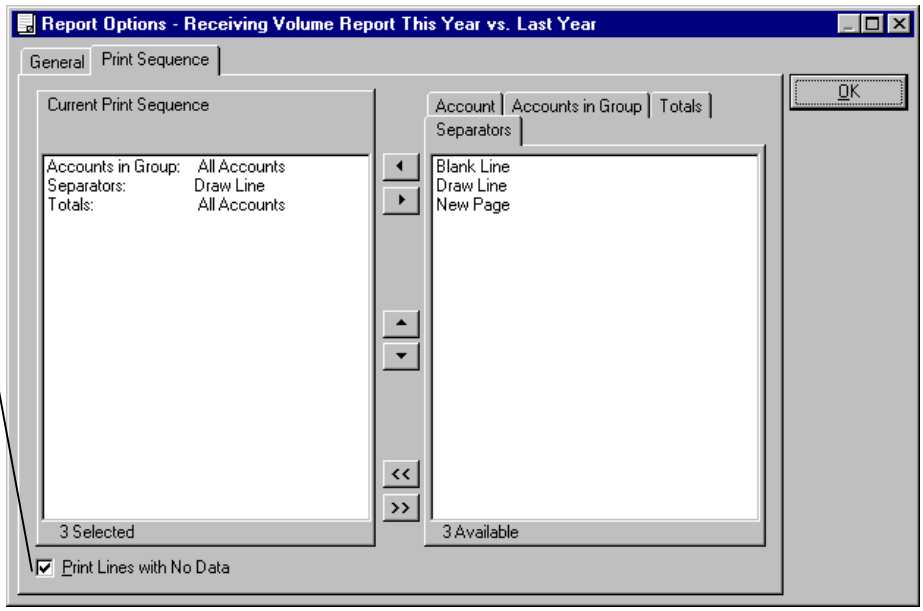
The list on the left contains what will be printed. The items in this list will be printed in the order in which they are listed. You can move an item up or down in the list by highlighting it and selecting the up or down buttons.

The window on the right contains what is available to be printed. The right window contains sub-tabs for Account, Accounts in Group, Totals, and Separators. Items in both left and right lists can be transferred back and forth using the left and right arrow buttons between the windows.

Suppressing Printing of Lines Without Data

ProRep's default setting is to print all lines on a report. At times there will be lines in a report with no data, a user may want to suppress the blank lines to shorten the length of the reports. To suppress printing of the blank line, un-check the Print Lines with No Data box on the Print Sequence tab.

Uncheck the Print Lines with No Data box to suppress the printing of blank lines.



Activity Detail Report Layouts

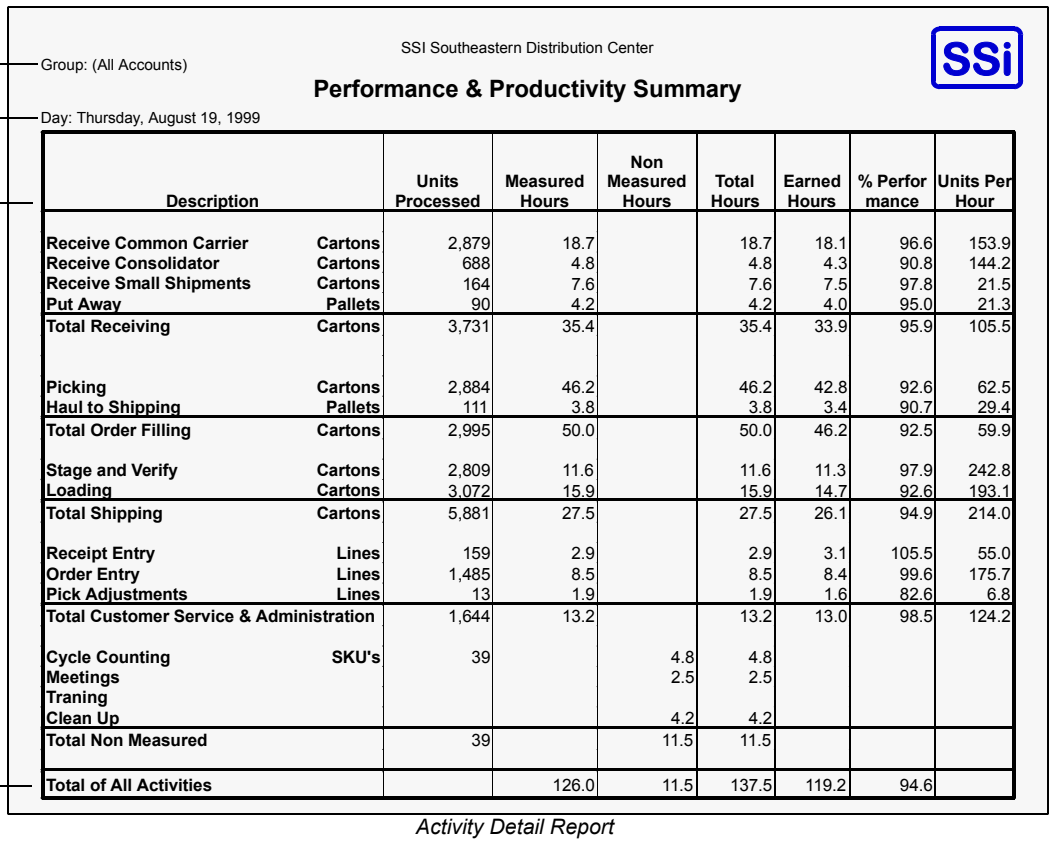
Activity Detail reports list multiple activities for an account or group of accounts on a single report. Each activity is listed on a separate line. The Activity Detail report allows quick evaluation of performance and production data for many activities on a single report.

Below is an example of an activity detail report.

Each account or group is printed on a seperate page.

The amount of time covered by the report is selected at printing.

Each activity is printed on a seperate line.



SSI Southeastern Distribution Center

Group: (All Accounts)

Performance & Productivity Summary

Day: Thursday, August 19, 1999

Description		Units Processed	Measured Hours	Non Measured Hours	Total Hours	Earned Hours	% Performance	Units Per Hour
Receive Common Carrier	Cartons	2,879	18.7		18.7	18.1	96.6	153.9
Receive Consolidator	Cartons	688	4.8		4.8	4.3	90.8	144.2
Receive Small Shipments	Cartons	164	7.6		7.6	7.5	97.8	21.5
Put Away	Pallets	90	4.2		4.2	4.0	95.0	21.3
Total Receiving	Cartons	3,731	35.4		35.4	33.9	95.9	105.5
Picking	Cartons	2,884	46.2		46.2	42.8	92.6	62.5
Haul to Shipping	Pallets	111	3.8		3.8	3.4	90.7	29.4
Total Order Filling	Cartons	2,995	50.0		50.0	46.2	92.5	59.9
Stage and Verify	Cartons	2,809	11.6		11.6	11.3	97.9	242.8
Loading	Cartons	3,072	15.9		15.9	14.7	92.6	193.1
Total Shipping	Cartons	5,881	27.5		27.5	26.1	94.9	214.0
Receipt Entry	Lines	159	2.9		2.9	3.1	105.5	55.0
Order Entry	Lines	1,485	8.5		8.5	8.4	99.6	175.7
Pick Adjustments	Lines	13	1.9		1.9	1.6	82.6	6.8
Total Customer Service & Administration		1,644	13.2		13.2	13.0	98.5	124.2
Cycle Counting	SKU's	39		4.8	4.8			
Meetings				2.5	2.5			
Traning								
Clean Up				4.2	4.2			
Total Non Measured		39		11.5	11.5			
Total of All Activities			126.0	11.5	137.5	119.2	94.6	

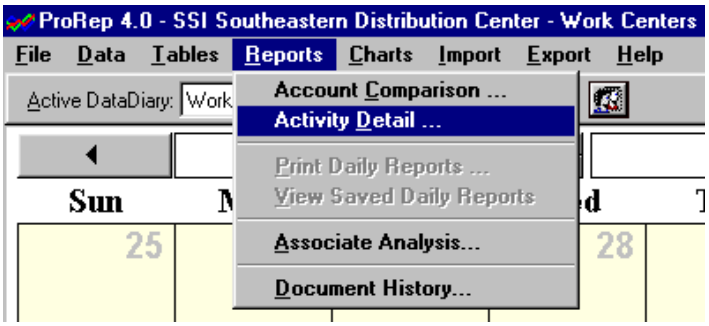
Activity Detail Report

There are four major components of an Activity Detail report:

- **Variables** are generic placeholders used in column formulas. Examples of variables are the words units, measured hours and earned hours. Different datafields are assigned to the variables on each detail line of the report.
- **Columns** on an activity detail report usually use variables in their formulas.
- **Lines** on an activity detail report are one of three types:
  - ***Detail Lines*** list the data for an activity. The variables such as units and hours are assigned different datafields on each detail line.
  - ***Sub-total Lines*** list the totals of the detail lines since the last time a sub-total line was printed.
  - ***Total Lines*** list the totals of the detail lines since the last time a total line was printed
- **Print Sequences** are a list of the accounts, groups and group totals for which a report is to be printed.

Setting up an Activity Detail report is very similar to setting up an Account Comparison report. The information provided in this section assumes that the reader is already familiar with how to set up an Account Comparison report. Therefore, it is recommended that the previous section be read and understood before proceeding on to this section.

To create a new activity detail report or edit an existing report, from the main menu select Reports then Activity Detail.

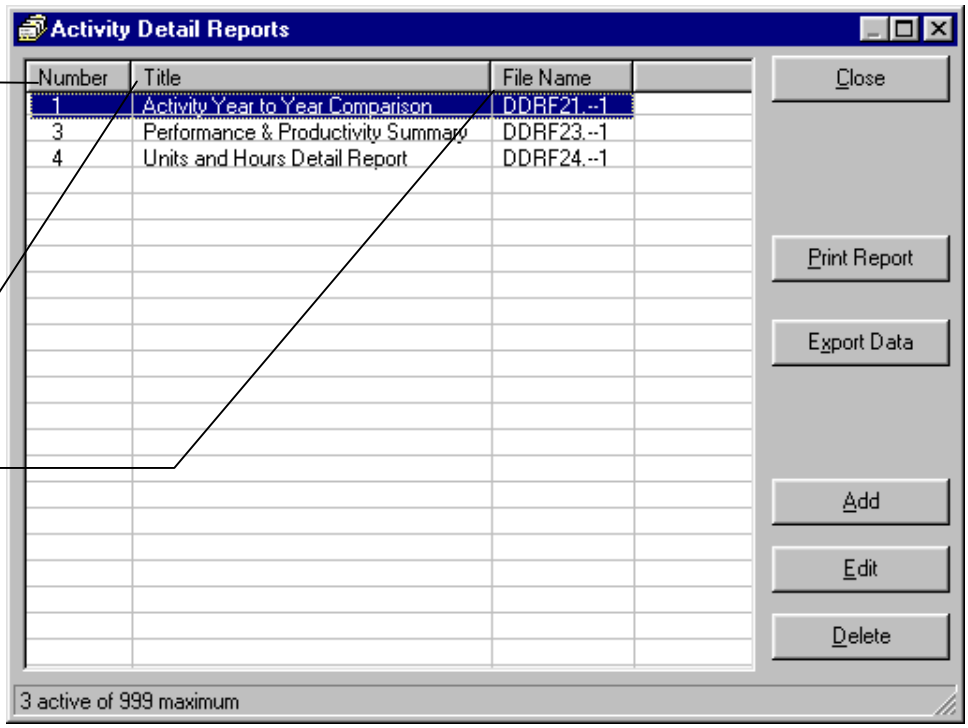


A window that lists all the Activity Detail report layouts that have been defined is displayed.

The report number, which is also printed on the report, allows easy identification of reports with similar names.

This is the title given to the report by the user.

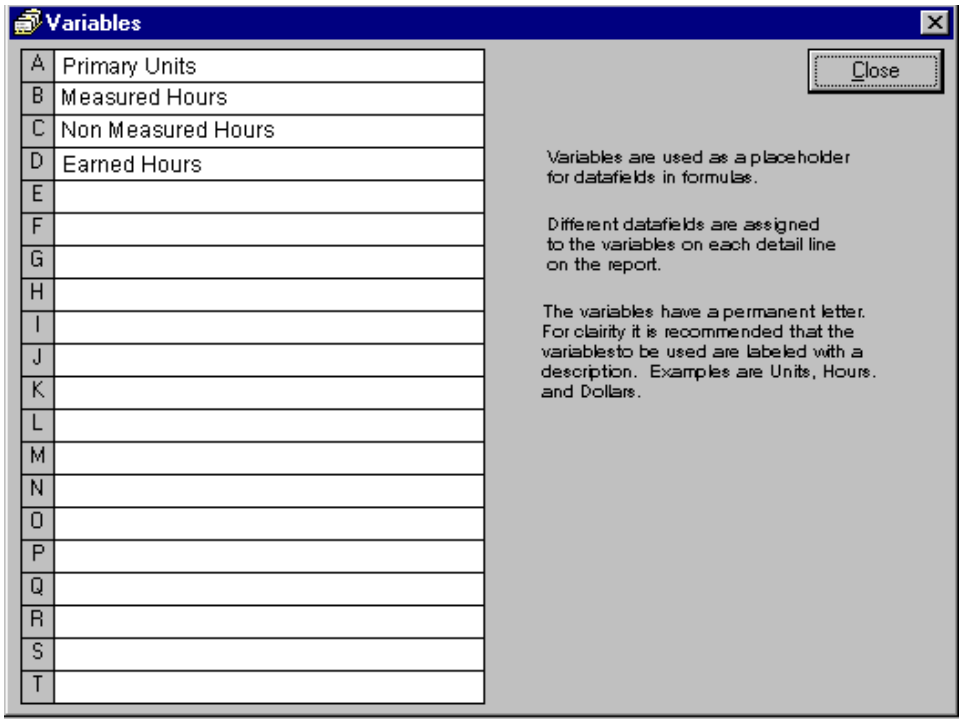
This is the name of the file that the layout is stored in. This file is saved in the same directory as the other database system files.



From this window a report can be printed, exported, viewed, added, edited, or deleted.

Adding a New Report

When a new report is added, the first window displayed is the Variables dialog box.



If an existing report is edited, the Variables dialog box shown above is not automatically displayed. Instead the Report Layout window is displayed. To maintain the list of variables from the Report Layout window, click the Variables button.

Variables

A variable is a symbol or word representing a quantity. For example, in the expression $a + b + c = total$, *a, b,* and *c* are variables. In ProRep, twenty variables are available for use on an activity detail report. The variables have a permanent letter. To help easily identify the variables, a label may be assigned. The labels commonly used are descriptive words such as cartons, pallets, measured hours, etc. A variable should ***not*** be a ratio such as Units per hour, Cost per Unit, or Cost per Hour.

Variables are used in the column formulas as place holders for datafields. On each detail line of the report, different datafields are assigned to the variables.

For example, the formula for the column on the report titled **Total Hours** is:

Total Hours = Measured Hours + Non Measured Hours

Measured Hours is Variable B

Non Measured Hours is Variable C

On the first two lines of the report, the datafields are assigned to the variables as shown below:

Line 1:

Primary Units	=	**Receive Common Carrier Cartons**
Measured Hours	=	**Receive Common Carrier Measured Hours**
Non Measured Hours	=	**Receive Common Carrier Non Measured Hours**
Earned Hours	=	**Receive Common Carrier Earned Hours**

Line 2:

Primary Units	=	**Receive Consolidator Cartons**
Measured Hours	=	**Receive Consolidator Measured Hours**
Non Measured Hours	=	**Receive Consolidator Non Measured Hour**
Earned Hours	=	**Receive Consolidator Earned Hours**

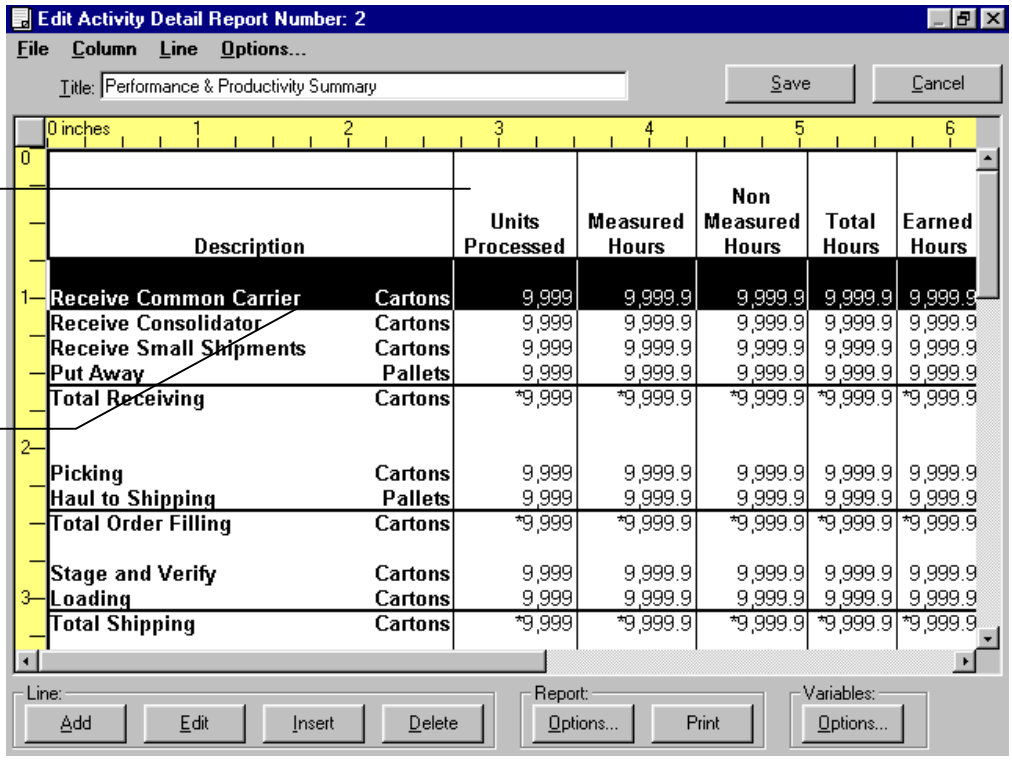
Variables *Datafields*

Editing an Existing Report

When editing an existing report, the first window displayed is the Report Layout window.

Click in the column heading to select the column.

Click anywhere on a line to select the line.

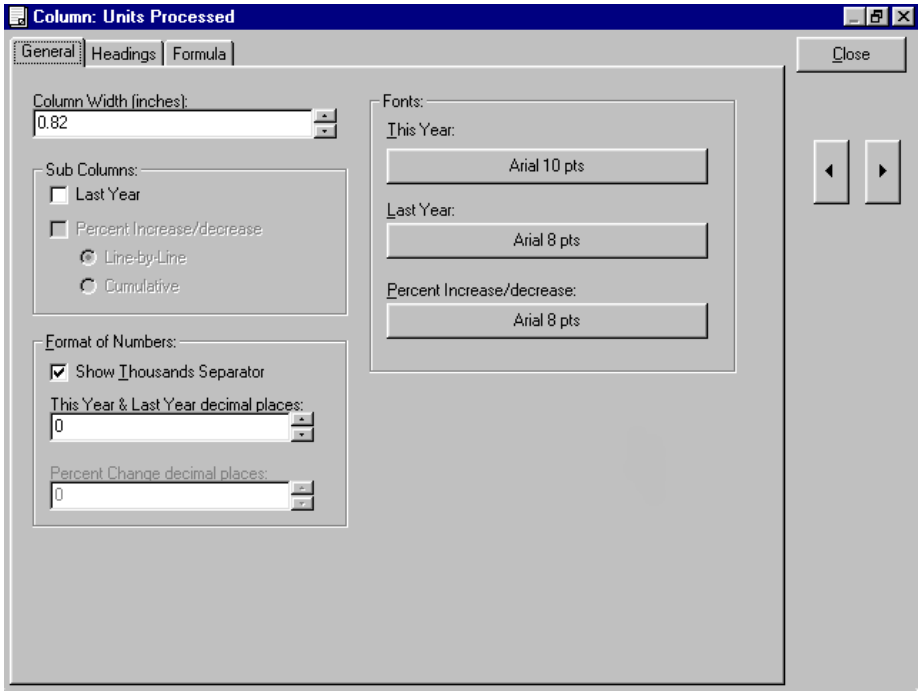

Edit Activity Detail Report Number: 2
File Column Line Options...
Title: Performance & Productivity Summary
Save
Cancel
0 inches 1 2 3 4 5 6
Description
Units Processed
Measured Hours
Non Measured Hours
Total Hours
Earned Hours
Receive Common Carrier Cartons 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Receive Consolidator Cartons 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Receive Small Shipments Cartons 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Put Away Pallets 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Total Receiving Cartons *9,999 *9,999.9 *9,999.9 *9,999.9 *9,999.9
Picking Cartons 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Haul to Shipping Pallets 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Total Order Filling Cartons *9,999 *9,999.9 *9,999.9 *9,999.9 *9,999.9
Stage and Verify Cartons 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Loading Cartons 9,999 9,999.9 9,999.9 9,999.9 9,999.9
Total Shipping Cartons *9,999 *9,999.9 *9,999.9 *9,999.9 *9,999.9
Line:
Add
Edit
Insert
Delete
Report:
Options...
Print
Variables:
Options...

Report Layout Window

Predefined reports can be edited. However, a modified pre-defined report must be saved as a new layout. To save changes to a pre-defined report, from the menu bar, select File, Save as New.

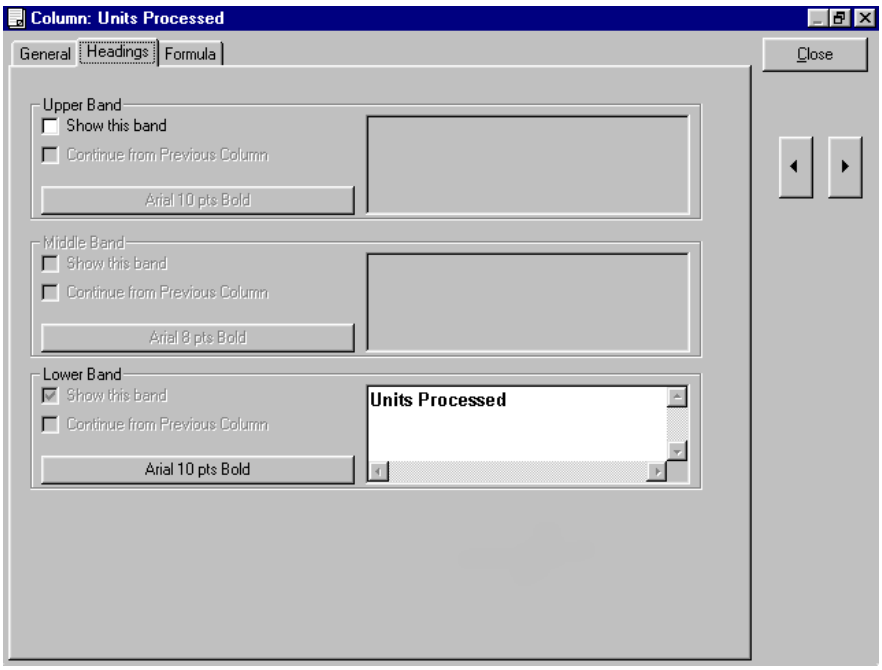
Adding or Editing a Report Column

To add a new column, from the menu bar select Column and click Add. To edit a column, click in the column heading and click the Edit button. The Column Setup dialog box is a tabbed interface with three tabs, General, Headings, and Formula.



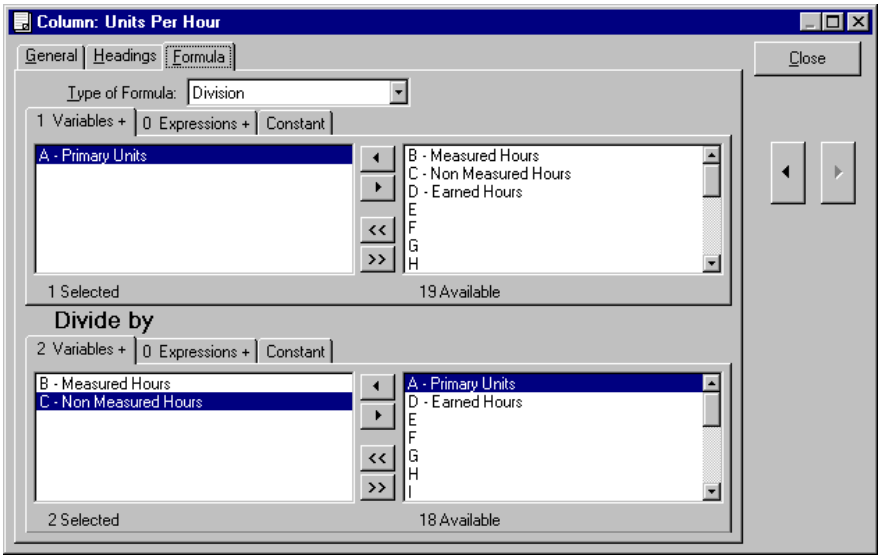
Column General Tab

The General tab contains controls for the visual characteristics of a column. Sub-Columns containing the previous year's data and the percent increase or decrease can be included in the column from this tab. The format of the fonts and numbers is selected on this tab.



Column Heading Tab

The Headings tab has three heading bands upper, middle, and lower. The upper and middle bands can span multiple columns. There is always a lower band.



Column Formula Tab

Formulas in activity detail reports differ slightly from the formulas used in expressions, account comparison reports, and graphs. The formula for an activity detail report column uses variables instead of datafields. Datafields are assigned to the variables on each line.

Adding and Editing lines on a report

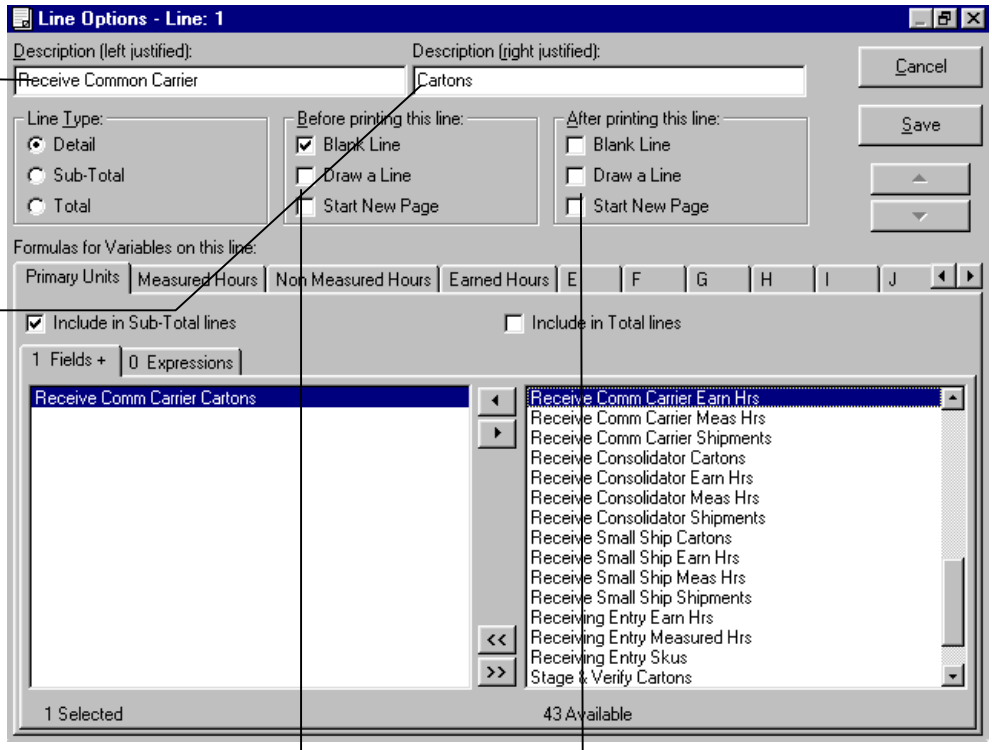
To add a new line to a report, from the menu bar select Line and Add. This adds a new line at the bottom of a report.

To insert a new line between two existing lines, click on the line before which the new line should be inserted and click the Insert button.

To edit an existing line, click on the line and click the Edit button.

The left justified line description is usually used to describe the type of activity.

The right justified line description is used on this report to specify the type of units that appear in the units column such as cartons, pallets, orders, etc.



Add visual separation between groups of activities.

Check the boxes to add a blank space or draw a line after this line.

Line Description

There are two line description boxes. One box is left justified on the printed report the other is right justified.

Specifying the Type of Line

There are three types of lines on an activity detail report. Detail lines contain information for a specific account or group of accounts. Sub-total lines contain a total of the lines above the sub-total line, beginning at the line after last sub-total. A total line contains the total of all detail lines, and is typically the last line on a report. To specify the type of line, on the Line Options dialog box, select the appropriate type.

Creating Separation Between Lines

To include a blank line or, to draw a line before or after a line of data, check the options on the Line Options dialog box.

Assigning Datafields to the Variables

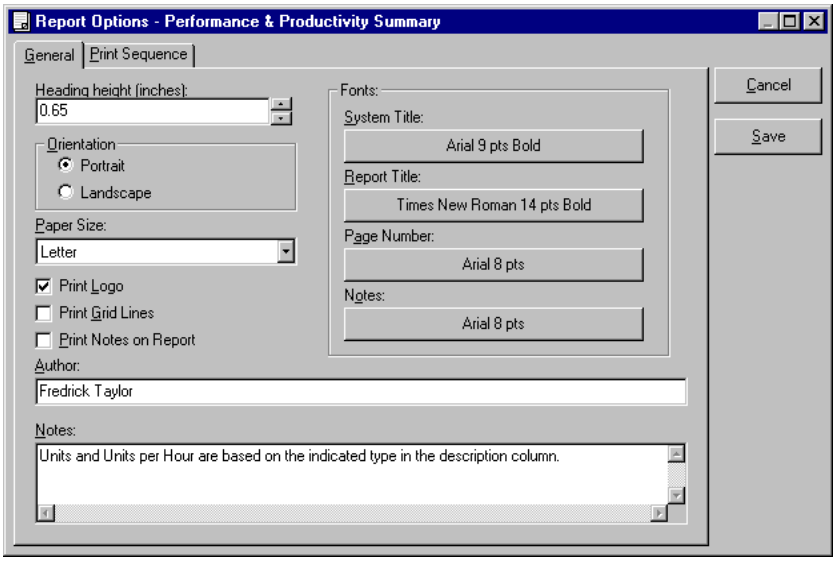
To select the datafield that is to substitute for a variable on a detail line, click on the variable tab and select the field(s) or expression(s). To move a field from the available list to the selected list, highlight the field to be moved and press the left arrow button. Alternately, you can double click on a field, and it will move to the opposite window.

Including a Variable in a Total or Subtotal Line

To include a variable's data in the total and/or subtotal lines, check the appropriate check boxes on the Line Options dialog box. This will add the value of the variable to subsequent total/subtotal lines. The default is to include all detail line variables in the sub-totals and tables.

Report Options

Report options such as paper orientation, additional notes, and title fonts are controlled from the Report Options dialog box. The Report Options dialog box can be accessed from the report layout window by clicking the Options button.

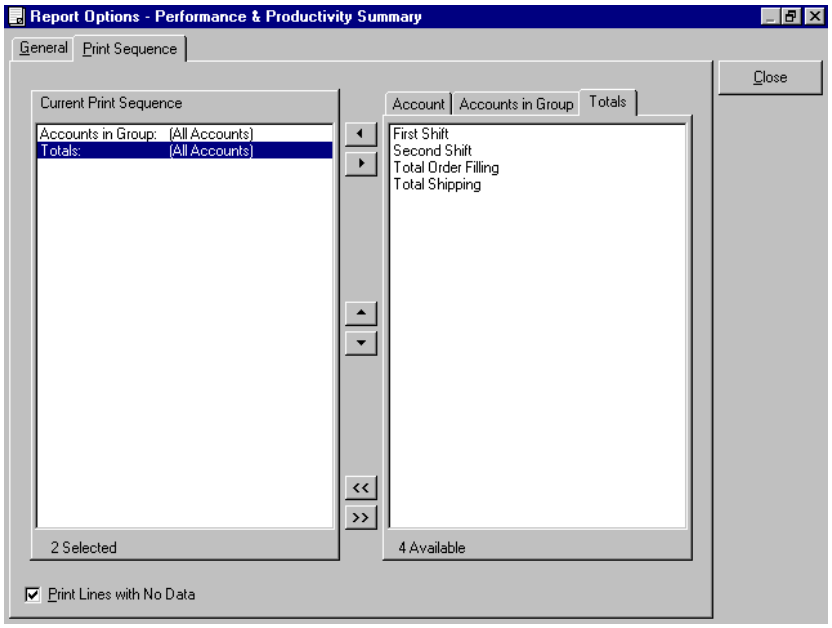


Report Options General Tab

The General tab is where paper size, orientation, logo, grid lines, and print notes options are set. Report title, page numbers, and fonts are also defined on this tab.

Selecting the Accounts and Groups to be Printed

To change the print sequences, from the Report Options window, select the Print Sequences tab.



Report Options Print Sequences Tab

On an activity detail report, the accounts and groups for which separate reports will be printed is controlled by the Print Sequences. When the report is printed, these accounts and groups will appear in the list of those to be printed as the defaults. The print sequences can be modified before printing.

The list on the left contains what will be printed. The items in this list will be printed in the order in which they are listed.

The window on the right contains what is available to be printed. The right window contains sub-tabs for Account, Accounts in Group, and Totals. Items in both left and right lists can be transferred back and forth using the left and right arrow buttons between the windows.

This Page Intentionally Left Blank

Chapter 16: Charts and Graphs

Pie charts and line graphs are very useful for analyzing trends and comparing the performances of activities, work centers, associates and allocations. Many different types of pre-defined charts are built into ProRep. Additionally, users can modify the pre-defined charts or create their own user-defined charts that focus on specific areas of interest.

Pie charts and line graphs can be viewed on screen and printed on monochrome and color printers. They can be saved as a Portable Document Format (PDF) file so that they can be shared with other people in the organization. They can also be copied to the clipboard and pasted into Microsoft Word documents and Microsoft PowerPoint presentations.

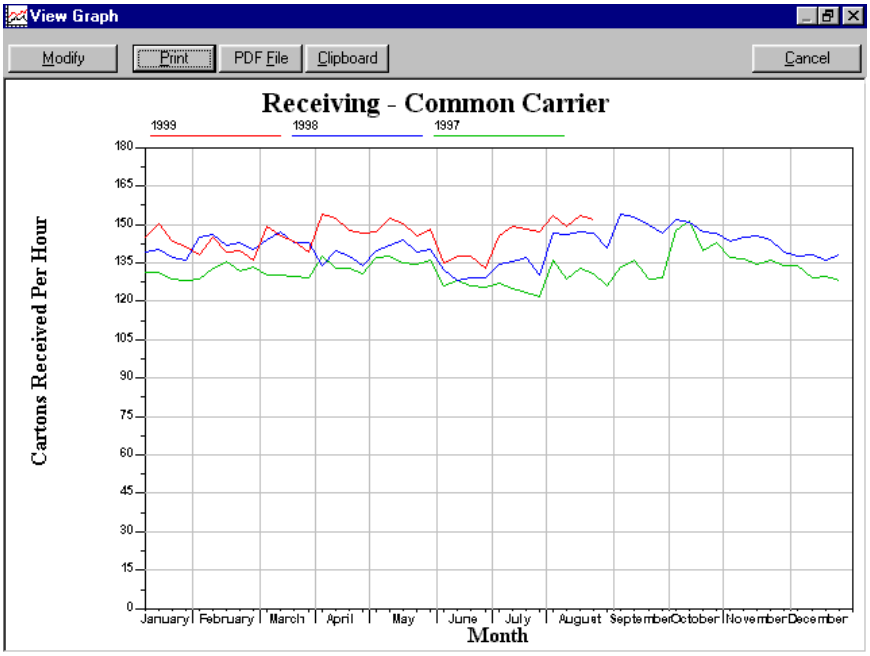
This chapter shows representative example charts as part of the process of setting up and viewing charts. Chapter 3 "The Information ProRep Provides" also shows many examples of both pre-defined and user-defined charts.

Viewing and Printing Line Graphs

There are three types of line graphs. They compare either multiple years, multiple accounts or multiple variables. Lines on each of these three types can be plotted by day, week or month.

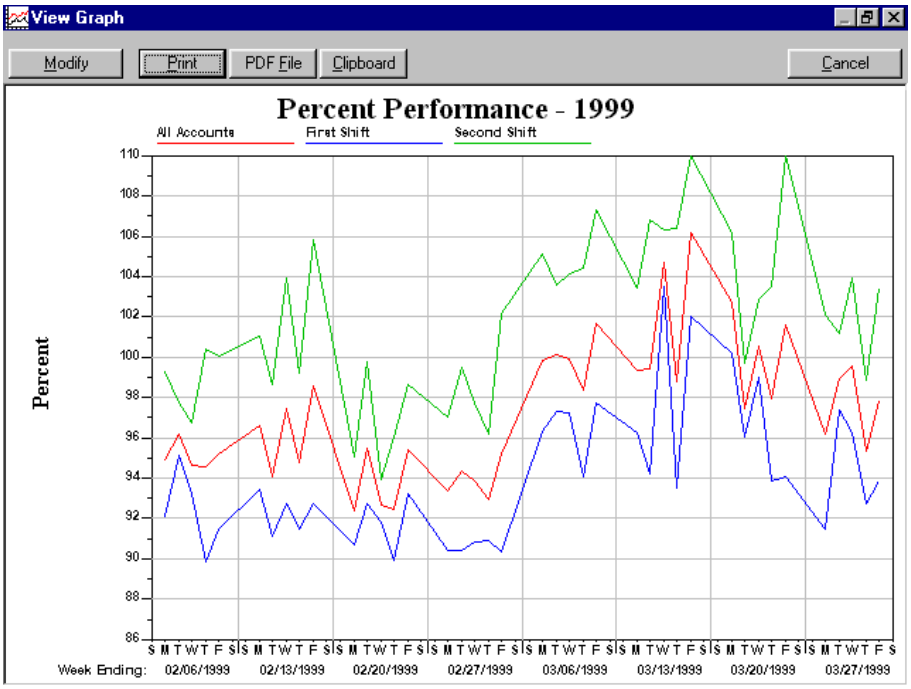
Following are examples of the available user-defined chart types.

Multiple year line graph displayed with weekly plot points.



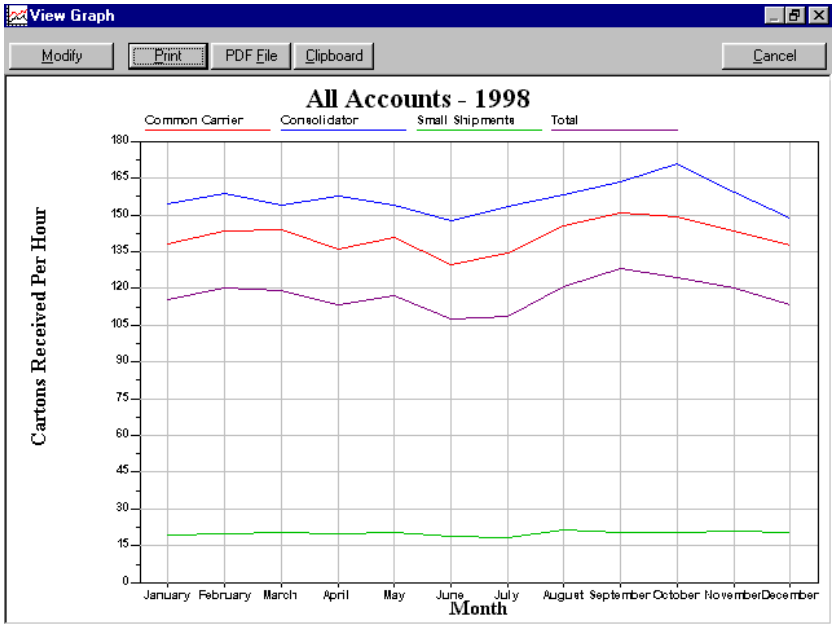
The above example is a multiple year line graph, with the data plotted by week. It plots one variable, common carrier cartons received per hour, for three different years. Line graphs can plot a maximum of five lines.

Multiple account line graph displayed with daily plot points.



The above example is a multiple accounts line graph. The data in the accounts is plotted on a daily basis. On a multiple accounts line graph, one variable is plotted for up to five accounts/groups.

Multiple variable line graph displayed with monthly plot points.



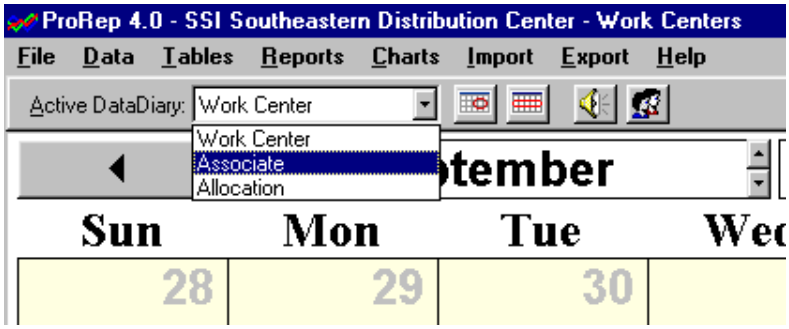
The above example is a multiple variable line graph. The data is plotted on a monthly bases.

All users can view and print line graphs. On the screen, line graphs are displayed in color. On a color printer, charts are printed in color. On a black and white printer, charts are printed with distinctive symbols at each point that is plotted to help distinguish between the different lines that are plotted.

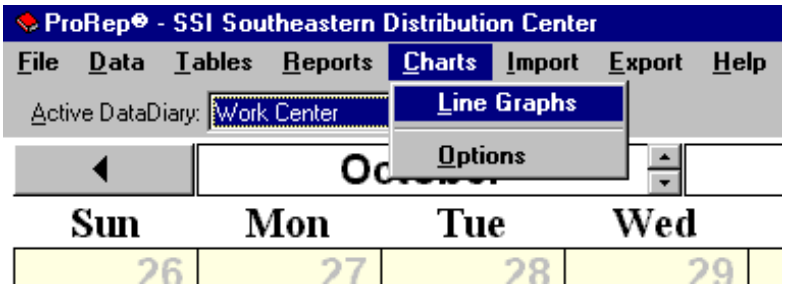
When a line graph is first viewed, what is plotted and how it is plotted is the default view saved in the layout. Nearly all of the settings can be changed by any level user while the report is being viewed. This is a very interactive process. Settings such as the scale or time period can be changed and the graph immediately re-displayed.

To print a line graph, it is first viewed on the screen. If necessary, the graph's settings can be modified. When the graph is displayed as desired, it is printed by clicking the viewing window's Print button.

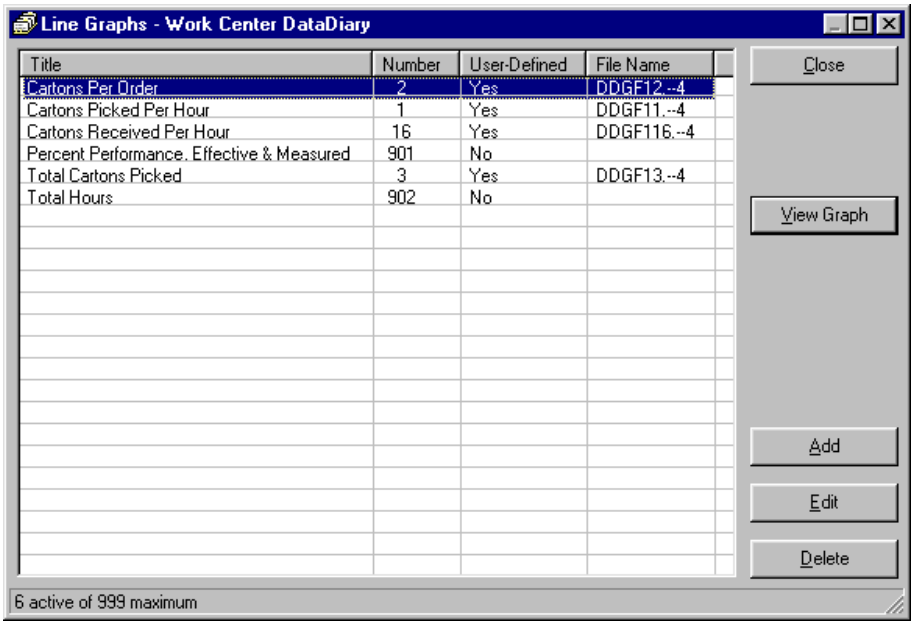
To view a line graph, select either the work center, associate, or allocation DataDiary as the active DataDiary



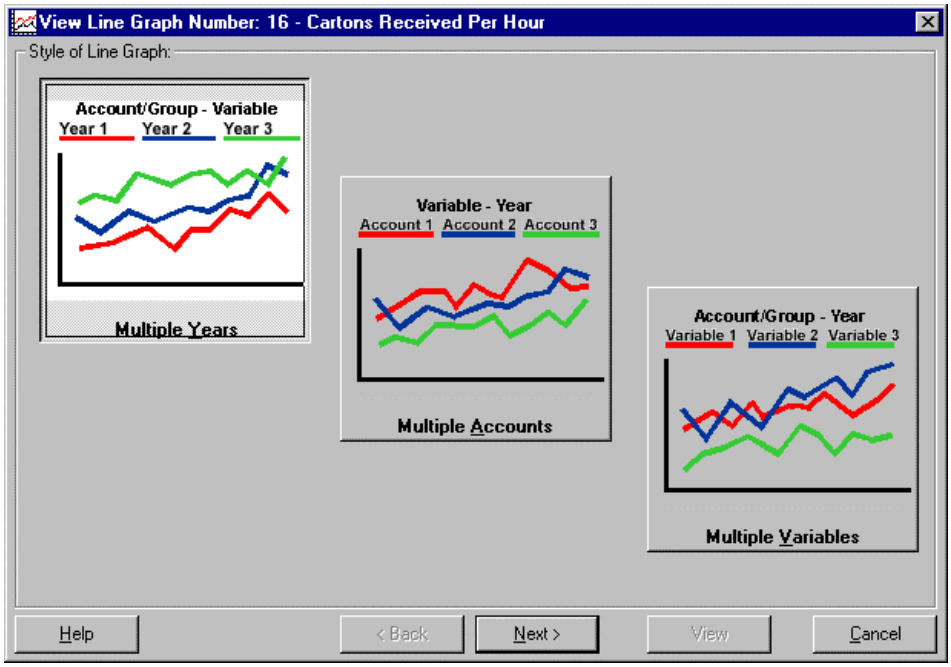
Then from the menu bar, select Charts, Line Graphs.



The list of line graphs that have been defined for the active DataDiary are displayed.



Click on the desired line graph, then click the View Graph button. This will activate the line graph wizard.

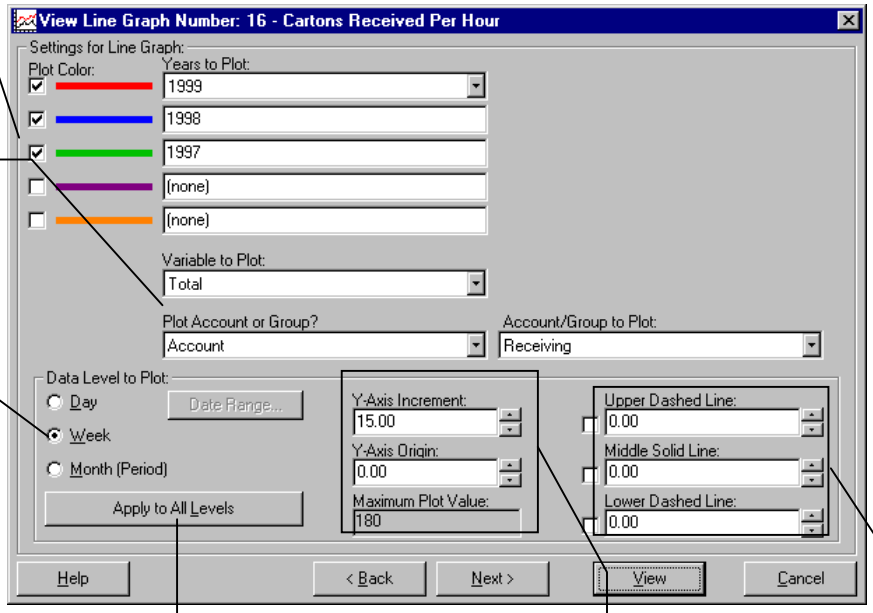


The wizard provides buttons for the three types of line graphs that are available. The text at the bottom of each button depicts the type of line graph. The graphic on each button demonstrates how data will be plotted. For example, selecting the Multiple Years button will plot from one to five lines with each line representing a different year. Click Next to continue through the wizard.

Up to 5 lines can be plotted. The lines will represent either years, accounts or variables depending on the type of graph.

Depending on the type of graph, this area allows selection of which variable, account/group or year each of the plot lines above will

Daily, weekly or monthly totals can be plotted.



There are separate settings in this area for each data level. Clicking this button will copy the displayed settings to the day and month data levels.

These settings control the graph's scale.

Arbitrary flat lines can be drawn to indicate goals, minimum levels, maximum levels.

This is the Settings for Line Graph page of the wizard. The graph can be viewed directly by clicking the View button. Clicking the Next button will display the Options page of the wizard where additional settings can be selected.

In the proceeding example, a multiple year type of line graph was selected. Notice that with this type of graph, from 1 to 5 lines can be drawn with each line representing a different year. Also notice that every year's data is for the same variable and account.

Selecting the Years to Plot

If the graph is a multiple year type then from 1 to 5 years can be potted at the same time. Otherwise, only one year can be plotted at a time. To select a year, from the Settings for Line Graph page of the wizard, click in the Year to Plot box and select any year in the DataDiary from the drop down list.

Selecting the Accounts or Groups to Plot

If the graph is a multiple accounts type then from 1 to 5 accounts or group of accounts can be plotted at the same time. Otherwise, only one account or group can be plotted at a time. To select an account or group, from the Settings for Line Graph page of the wizard, click in the Plot or Account or Group box, select Account or Group, then click in the Account/Group to Plot box and select any account/group in the DataDiary from the drop down list.

Selecting the Variables to Plot

Variables are formulas comprised of datafields in the DataDiary. The variables are part of the graph layout. If the graph is a multiple variables type then from 1 to 5 variables can be potted at the same time. Otherwise, only one variable can be plotted at a time. To select a variable, from the Settings for Line Graph page of the wizard, click in the Variable to Plot box and select any variable in the DataDiary from the drop down list.

Plotting by Day, Week or Month

The lines on a graph are created by plotting data points and connecting lines between the points. The points that are plotted can be either a day, a weekly total or monthly total. If the data in the diary is kept by week and not by day, plotting by day is not possible. To select the data level of the points that are plotted, from the Settings for Line Graph page of the wizard, click either Day, Week or Month (Period).

Note that all of the settings in the Data Level to Plot section at the bottom of the Settings for Line Graph page of the wizard, are only associated with the currently selected plot level. That is, the settings that are used for weekly plotting are independent of the settings for monthly plotting. To copy the currently displayed settings into both of the other plot levels, click the Apply to All Levels button.

Selecting the Time Period When Plotting by Day

When the plot level is day, only 8 weeks can be plotted at the same time. To select the time period that is plotted, from the Settings for Line Graph page of the wizard,

click Date Range. This displays a calendar. Click on any day in the last week to be plotted.

Changing the Scale

The best way to determine the correct settings is trial and error.

There are 12 increments on the Y-axis scale. For Example, if the scale's starting point is 0 (zero), and the Y-axis increment is 10, then the largest value that can be plotted is 120. To change the value of each increment, from the Settings for Line Graph page of the wizard, click in the Y-Axis Increment box and enter a value. The maximum value that can be plotted is automatically calculated and displayed.

Setting the Scale's Starting Point

Sometimes, a statistic that is plotted shows little change over time. For example, units per hour may vary only between 26 and 28 units per hour. When graphed with a starting point of 0 (zero) and an increment value of 3, any value between 0 and 36 (3x12 increments) can be plotted. In this case, the lines are nearly flat with little difference between the lines. To exaggerate the movement of the line, the value of increment could be set to .5 and the starting point to 24. This will result in the scale ranging from 24 to 30. To change the scale's starting value, from the Settings for Line Graph page of the wizard, click in the Y-Axis Origin box and enter a value. The maximum value that can be plotted is automatically calculated and displayed.

Plotting Arbitrary Horizontal Lines

Arbitrary flat lines can be drawn to indicate goals, minimum levels, maximum levels, etc. Up to 3 flat lines can be plotted. They are labeled Upper Dashed Line, Middle Solid Line, and Lower Dashed Line. Any or all of these can be plotted. Any value can be set for these lines. To plot an arbitrary flat line, from the settings for Line Graph page of the wizard click in the desired style of line's box and enter a value. To stop plotting the line, un-check the check box next to the line style.

Using the Same Scale for Daily, Weekly and Monthly Plotting

All of the settings displayed in the Data Level to Plot section at the bottom of the Settings for Line Graph page of the wizard, are only associated with the currently selected plot level. That is, the settings that are used for weekly plotting are independent of the settings used for monthly plotting. To copy the currently displayed settings into both of the other plot levels, click the Apply to All Levels button.

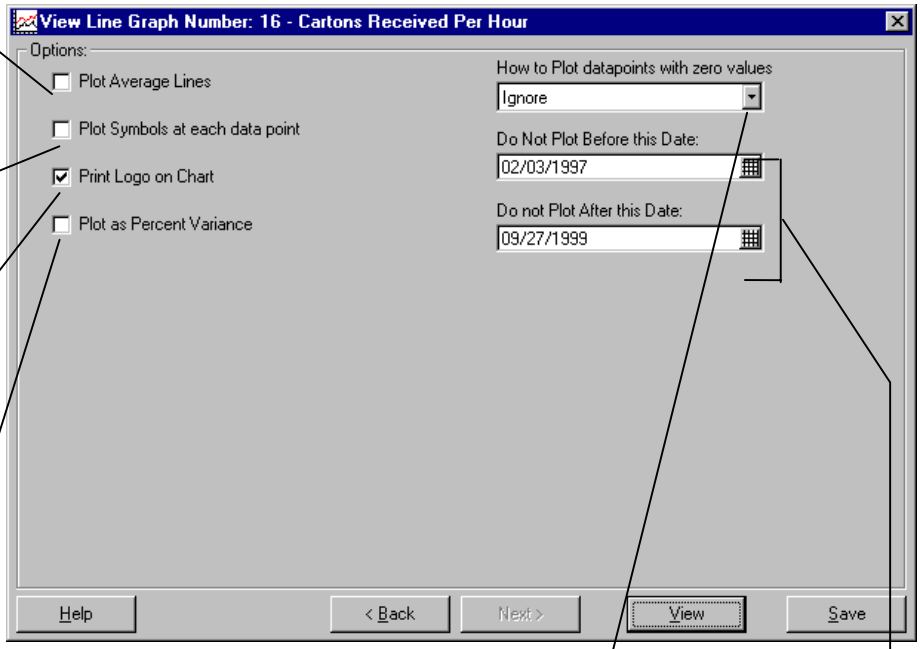
Clicking the Next button will display the Options dialog page of the wizard.

Plots horizontal lines at the average value of each plot line.

Draws a symbol such as a square around each data point.

Adds your logo to the chart. A graphic named logo.bmp needs to be saved in the ProRep directory for this to work.

Plots the line as the percent difference from the lines average value



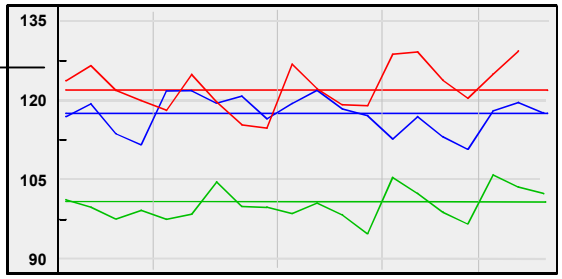
How to plot datapoints with no value, has three options ignore, plot, or don't plot. This is often used when plotting by day.

Excludes the plotting of lines outside of these dates.

Plotting a Line's Average Value

Flat horizontal lines can be drawn at the average value of each line that is plotted. To plot the averages, from the Options page of the view line graph wizard, check the Plot Average Lines check box.

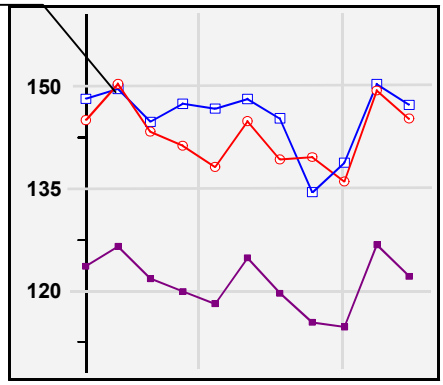
This is an example of plotting average lines.



Drawing Symbols at Each Point That is Plotted

On black and white printers, distinctive symbols are always drawn at each point that is plotted. For example, one line may have a hollow circle drawn at each point while another line has filled squares. To also draw symbols on the screen or on a color printer, from the Options page of the view line graph wizard, click the Plot Symbols at Each Data Point check box.

This is an example of plotting symbols at each data point. (note: if the graph is printed on a black and white printer the symbols will be automatically printed.)



Printing a Logo on a Graph

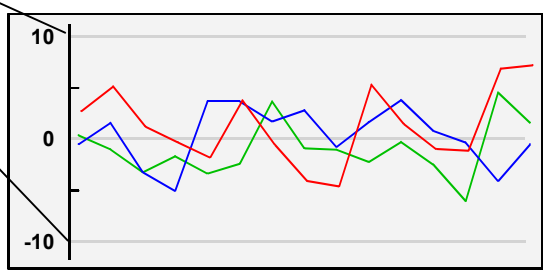
To include a logo on a graph, from the Options page of the view line graph wizard, check the Print Logo on Chart check box. The logo is copied from a graphic image file. The file must be named LOGO.BMP, LOGO.WMF or LOGO.GIF and it must be one of the following types: Windows Bitmap (.bmp), Windows Metafile (.wmf) or CompuServe GIF (.gif). The logo file must be in the folder where the ProRep program is installed.

Plotting Lines as a Percent Variance from Average

To compare statistics with different units of measure, lines can be drawn as their percent difference from their average value. For Example, did an 8% increase in units produced require an 8% increase in production hours? To plot the variances, from the Options page of the view line graph wizard, check the Plot as Percent Variance check box.

Ten percent above average.

Ten percent below average.



Handling Points that Have a Value of Zero

When a plot point is zero there are three options as explained below:

Ignore	Plot from the previous non-zero point to the next non-zero point.
Plot	Plot the point as a zero.
Don't Plot	Do not plot the point. This will cause a break in the line.

To specify how points of zero should be handled, from the Options page of the view line graph wizard, click in the How to Plot Data Points with Zero Values box and select a method from the drop down list.

Plotting Only Within a Specific Range of Dates

If the DataDiary does not contain data before a certain date or the current time period's data is incomplete, you may not want to avoid plotting some of the points for the first dates and last dates. To specify the date before which not to plot, from the Options page of the view line graph wizard, click the calendar button in the Do Not Plot Before this Date box and select the date. To specify the date after which not to plot, from the Options page of the view line graph wizard, click the calendar button in the Do Not Plot Before this Date box and select the date.

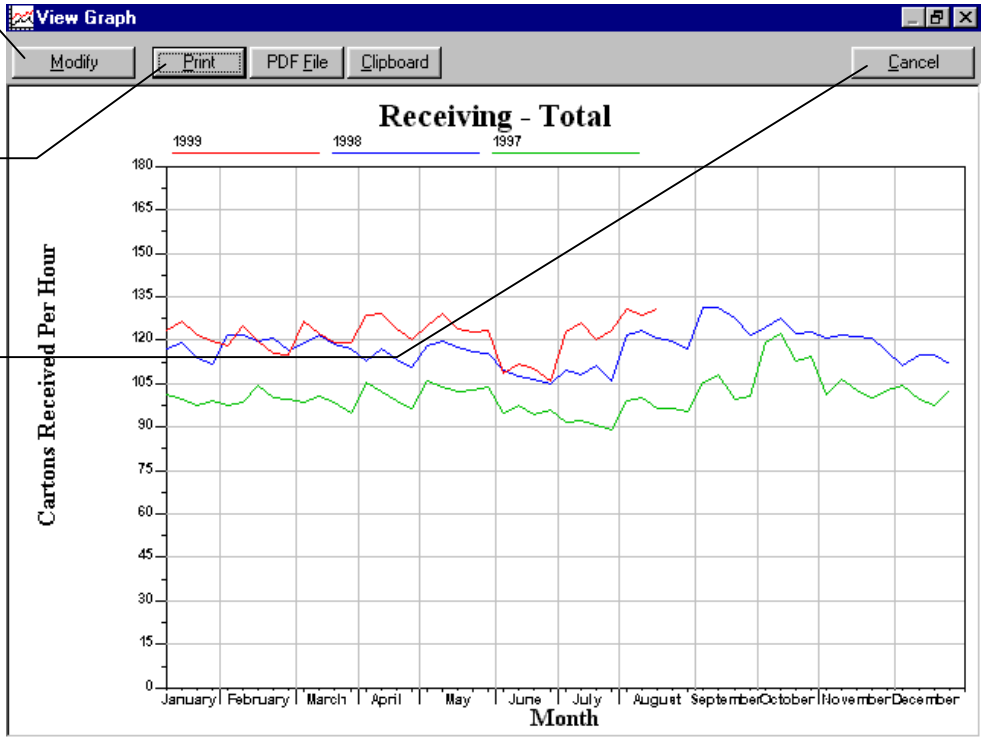
The default start plotting date for all graphs can be specified from the main menu by selecting Charts, then Options and selecting the date from the calendar.

Selecting the View button from either the Options page or Settings for Line Graph page of the wizard will display the line graph.

Graphs can only be printed while they are being viewed.

To modify the graph's appearance click Modify.

To return to the list of available graphs click Cancel.



After the graph is displayed, any of the graph's print settings in the Wizard's dialog boxes can be changed by clicking the Modify button. You will be returned to the page of the wizard from which the view button was selected.

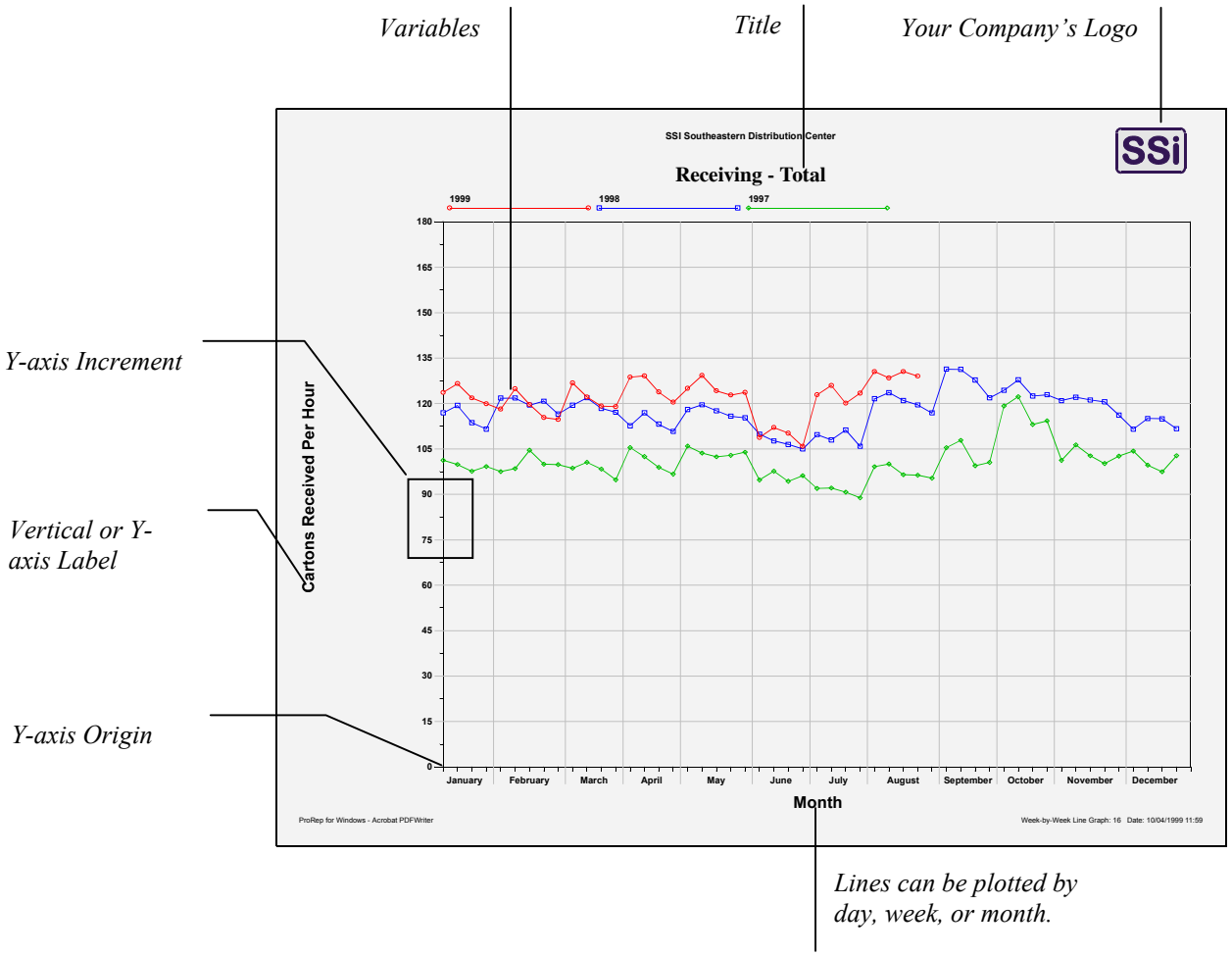
Printing the Graph

To print the graph, from the View Graph window, click the Print button. This will print the graph to the selected printer with the selected paper size and orientation. The graph is automatically sized to fit the page. After printing, the graph will be re-displayed in the View Graph window.

Modifying and Creating Line Graphs

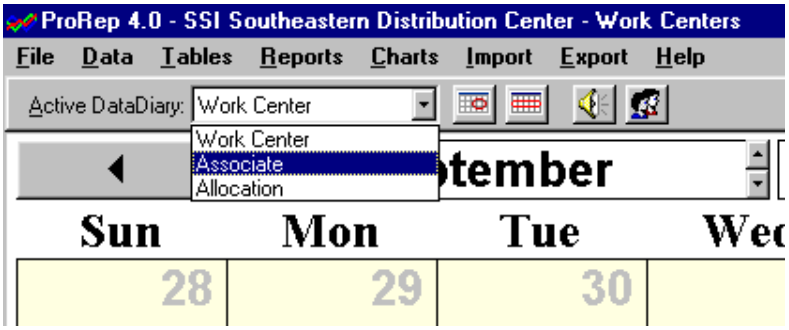
All user-defined graphs in ProRep are created by defining a graph layout. The layout specifies what information should be included on the graph and how it should be displayed. The same layout is used to view all three types of line graphs.

Below is an example of a multiple years line graph that shows the major components that are defined in the layout.

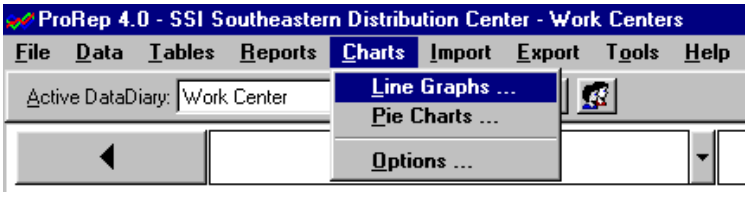


Adding or Editing a Graph

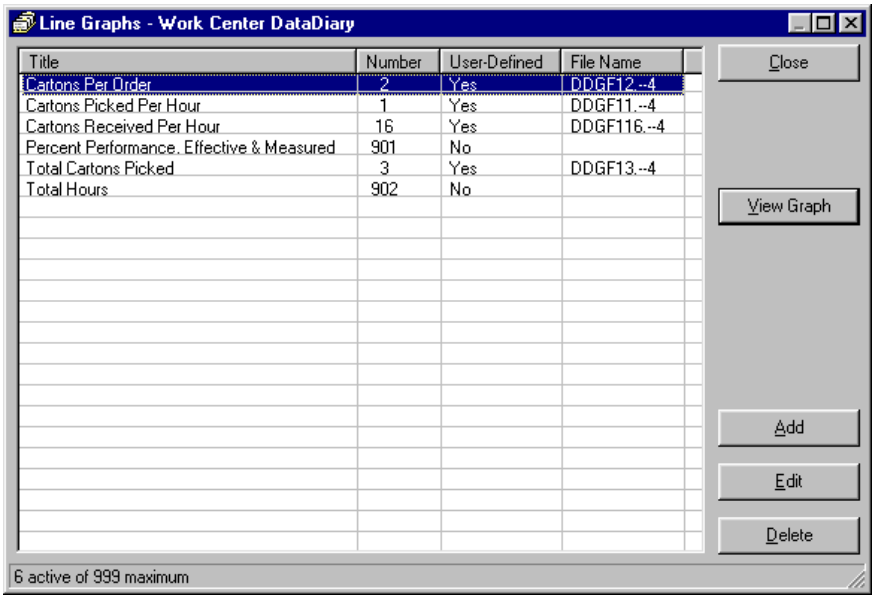
To setup a new or edit an existing line graph, select either the work center, associate, or allocation DataDiary as the active DataDiary


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
Work Center
Associate
Allocation
Sun Mon Tue
28 29 30

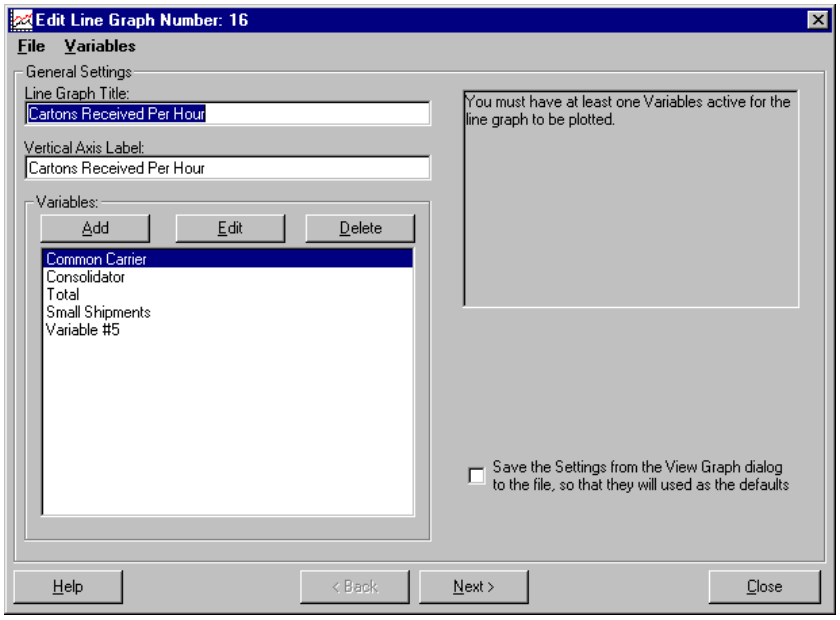
Then, from the main menu select Charts and then Line Graphs.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Line Graphs ...
Pie Charts ...
Options ...

This displays a list of previously defined graphs.


Line Graphs - Work Center DataDiary
Title Number User-Defined File Name
Cartons Per Order 2 Yes DDGF12.--4
Cartons Picked Per Hour 1 Yes DDGF11.--4
Cartons Received Per Hour 16 Yes DDGF116.--4
Percent Performance, Effective & Measured 901 No
Total Cartons Picked 3 Yes DDGF13.--4
Total Hours 902 No
Close
View Graph
Add
Edit
Delete
6 active of 999 maximum

The procedure for adding or editing a line graph is nearly identical. To add a new graph, click the add button. To edit an existing graph, click edit.

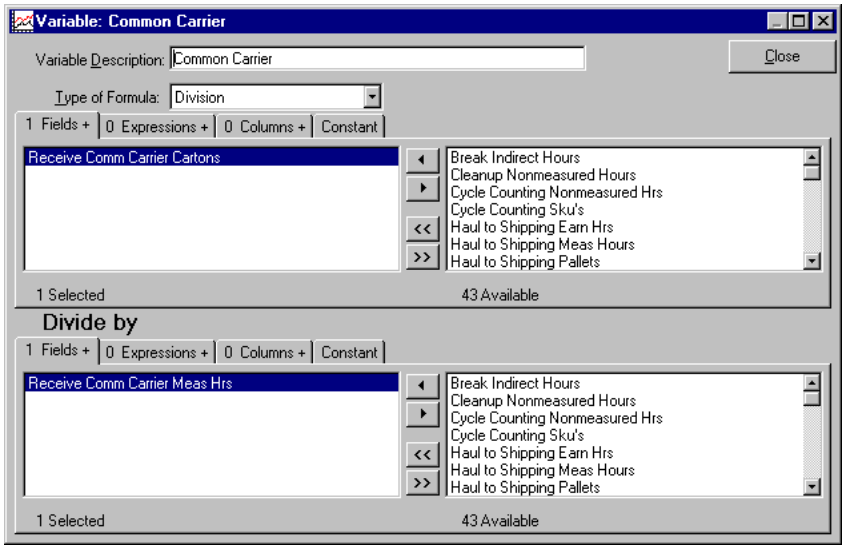


This window allows you to change the graph description, vertical axis label and variables.

- The graph description is only used for the name displayed in the list of graphs.
- The vertical or Y-axis label describes the unit of measure that is plotted.
- The variables are formulas that use datafields from the DataDiary to define what is plotted.

Selecting the Data to be Plotted

The data to be plotted is selected by setting up variables, that are formulas for units, hours, percentages, units per hour, etc. Setting up variables is the most important part of creating a graph. After selecting the Add or Edit button the following window is displayed.



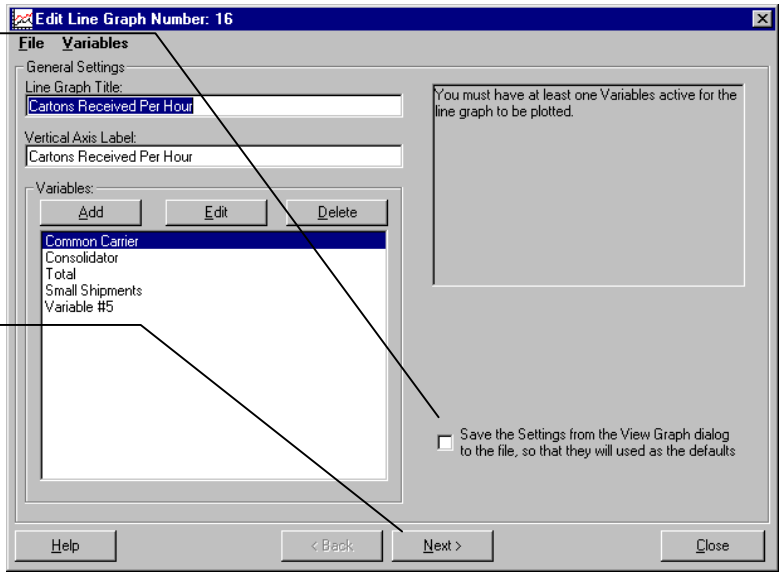
The variable should be given a description that will appear in the title or legend when the graph is viewed. Next, select the Type of Formula from the pull down list. Then, build a formula by selecting the datafields and expressions. See Chapter 10 Setting up User-Defined Formulas and Expressions for more information.

Specifying the Graph's Default View

After at least one variable is set up, the line graph can be viewed. Default values are automatically established for the type of graph, Y-axis scale, accounts and years to be plotted. These values can be changed while viewing the graph by both an administrator or lower level user. The changes made by a lower level user are only temporary and never saved in the layout. The changes made by an administrator can be either temporary or permanent. To allow saving changes made while viewing the graph, check the save settings box as shown below.

To allow saving changes to a graph's scale and other viewing options check this box.

Then click the Next button.



Click the Next button to change the graph's default view. The View Line Graph window is displayed. At this point, the process is actually the same as if you were only viewing the graph. However, after saving the changes to the default view, you will be returned to the Edit Line Graph window where you can save the graph layout to disk.

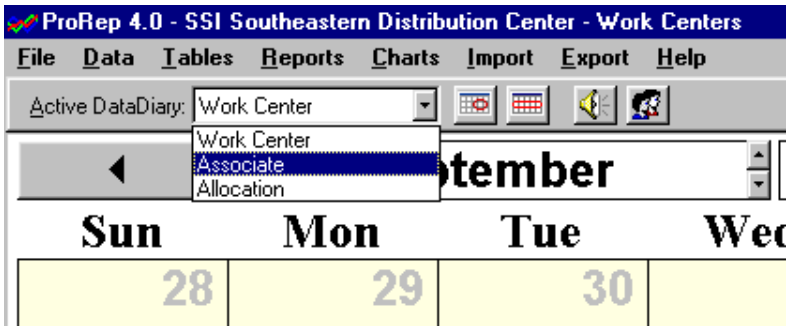
Viewing and Printing Pie Charts

All users can view and print pie charts. On the screen, pie charts can be displayed in color. On a color printer, pie charts are printed in color. On a black and white printer, they can be printed with distinctive patterns.

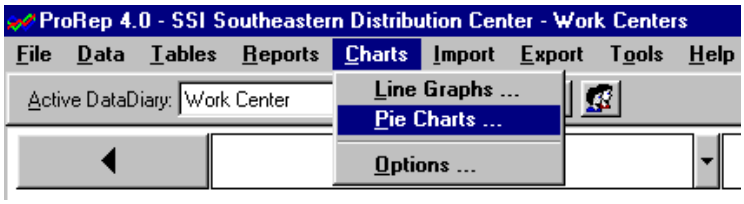
When a pie chart is viewed, the settings and time period can be changed by any level user. This is a very interactive process.

To print a pie chart, it is first viewed on the screen. If necessary, the chart's settings can be modified. When the chart is displayed as desired, it is printed by clicking the viewing window's Print button.

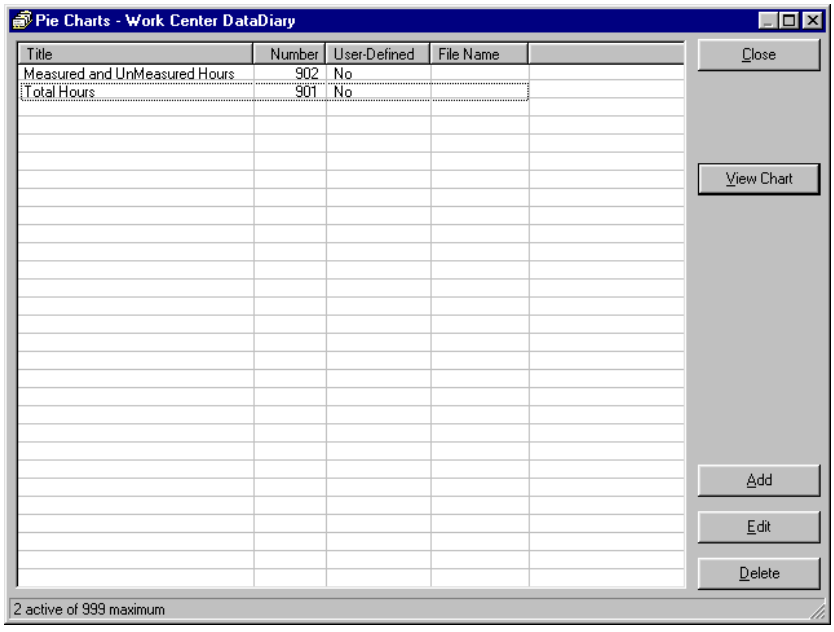
To view a pie chart, select either the work center, associate, or allocation DataDiary as the active DataDiary



Then from the menu bar, select Charts, Pie Charts.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Line Graphs ...
Pie Charts ...
Options ...

A list of pie charts defined for the active DataDiary is displayed.

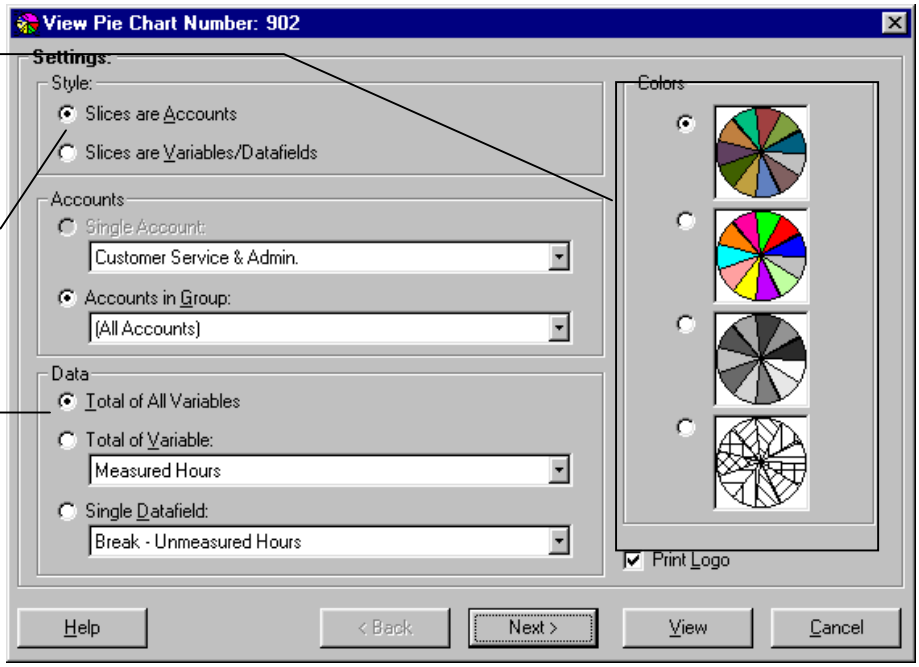


Click on the desired pie chart, then click the View Chart button. This will activate the pie chart wizard.

Four Color Pallets are available, including black and white patterns and grey scale.

Slices of the pie chart can be individual accounts or datafields.

The entire pie chart's Data can be either a datafield, a variable, or a total of all variables.



Selecting the Pie Chart Style

Pie charts can display the "slices" as accounts or variables/datafields. Accounts are set up elsewhere in ProRep. Variables/ Datafields are set up when the chart layout is defined.

Selecting which Accounts are Charted

When the slices are variables, a specific account or a specific account group is selected. When the slices are accounts, a specific account group is selected.

Selecting the Pie Chart's Data

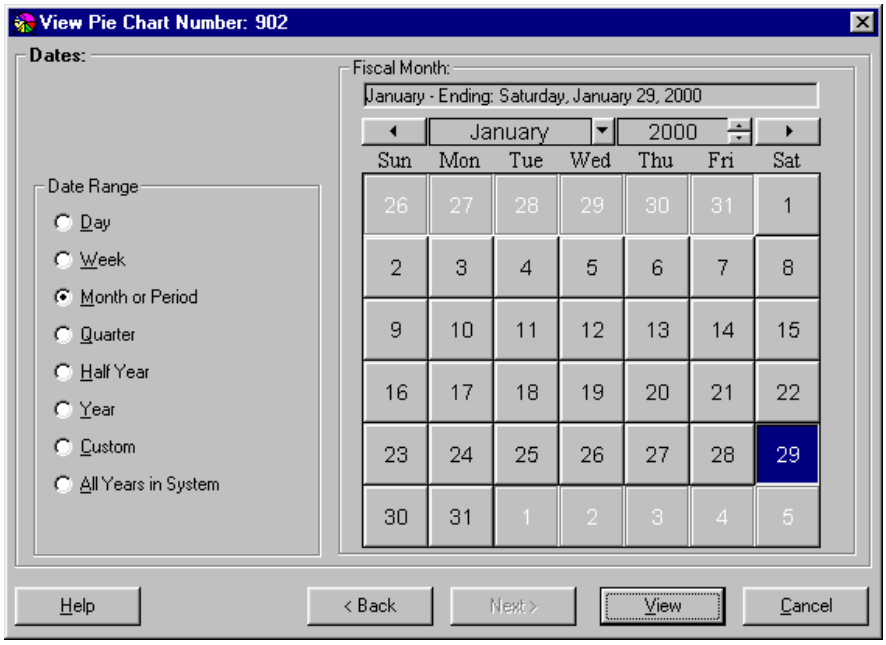
If the slices are accounts the pie's data can be either the total of the data for all variables, a single variable or a single datafield.

If the slices are variables or datafields, the pie's data can be either a total of all variables on the chart or a total of the datafields in a single variable.

Selecting the Pie Chart Color

There are for color schemes available for pie charts. The bright and muted color choices are designed for on-screen and color printing. The grey scale and pattern color choices are designed for black and white printers.

Click Next to continue. The next page of the wizard is displayed.



Selecting the Date Range

Any length of time can be charted. ProRep will chart from a single day to all years in the DataDiary.

Click View to view the pie chart.

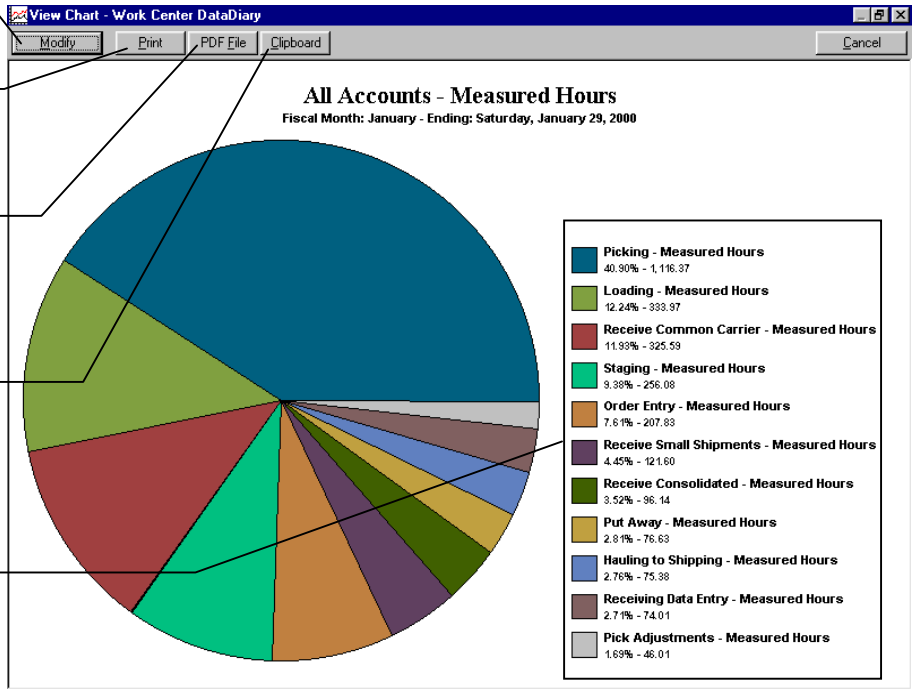
To modify the Pie Chart's appearance click Modify.

Pie Charts can only be printed while they are being

Create a PDF file using ProRep's PDF writer by clicking here.

The Pie Charts can be copied onto the clipboard and then pasted into a Microsoft Word document.

The legend to the right of the pie chart identifies each "slice."



The legend to the right of the pie chart identifies each "slice."

Printing Pie Charts

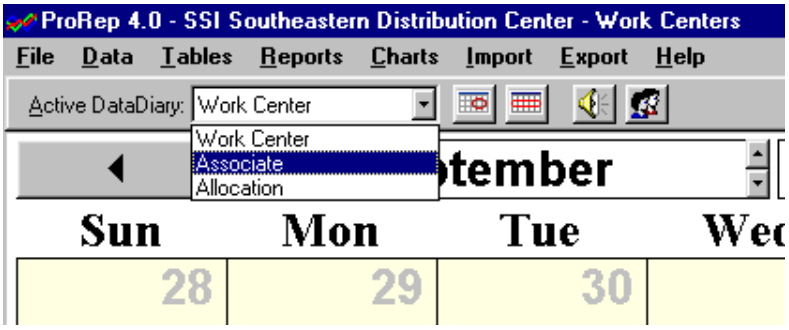
To print the pie chart, from the View Pie Chart window, click the Print button. This will print the chart to the selected printer with the selected paper size and orientation. The chart is automatically sized to fit the page. After printing, the chart will be re-displayed in the View Pie Chart window.

.

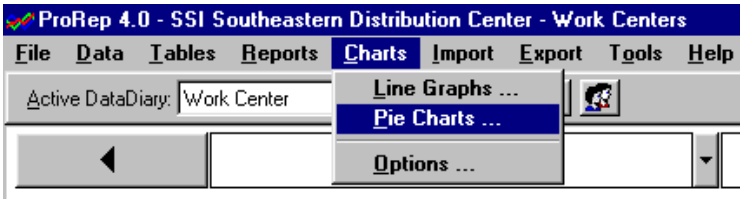
Modifying and Creating Pie Charts

All user-defined pie charts in ProRep are created by defining a pie chart layout. The layout specifies what information should be included on the pie chart.

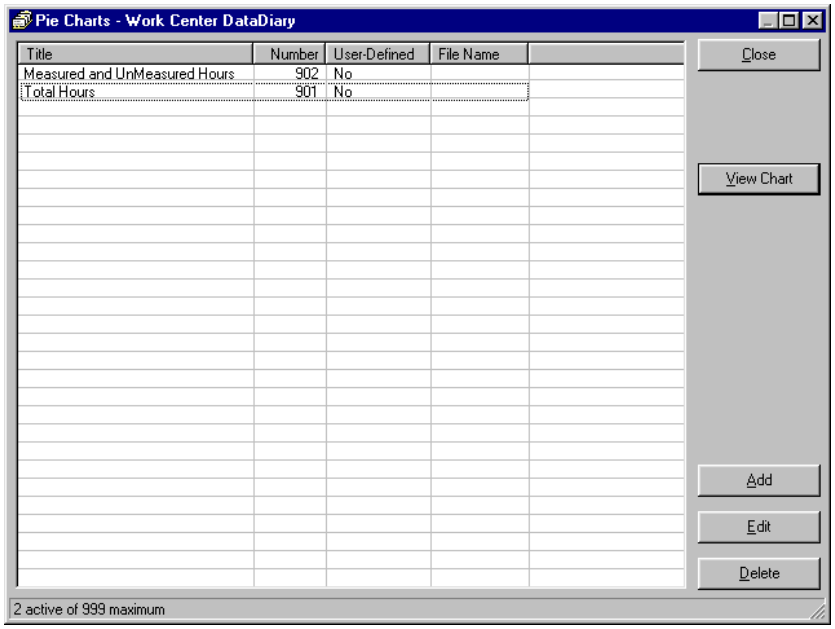
To set up a new or edit an existing pie chart, select either the work center, associate, or allocation DataDiary as the active DataDiary


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Help
Active DataDiary: Work Center
Work Center
Associate
Allocation
Sun Mon Tue
28 29 30

Then from the menu bar, select Charts, Pie Charts.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
File Data Tables Reports Charts Import Export Tools Help
Active DataDiary: Work Center
Line Graphs ...
Pie Charts ...
Options ...

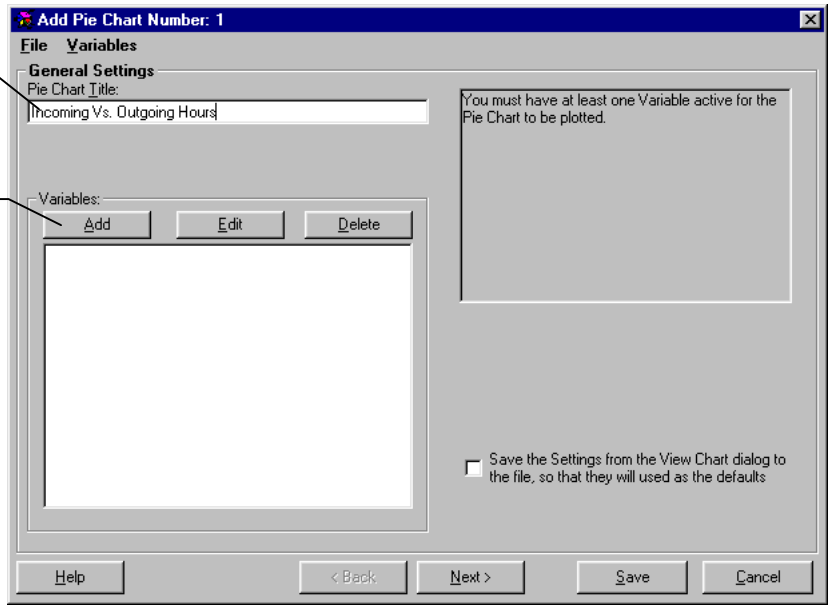
A list of previously defined Pie Charts is displayed. Click the Add or Edit button to create or change a pie chart.



The procedure for adding or editing a pie chart is nearly identical. To add a new pie chart, click the add button. To edit an existing pie chart, click edit.

Enter the title of the chart.

Variables are created from datafields. Variables are used to define the data that the slices represent.

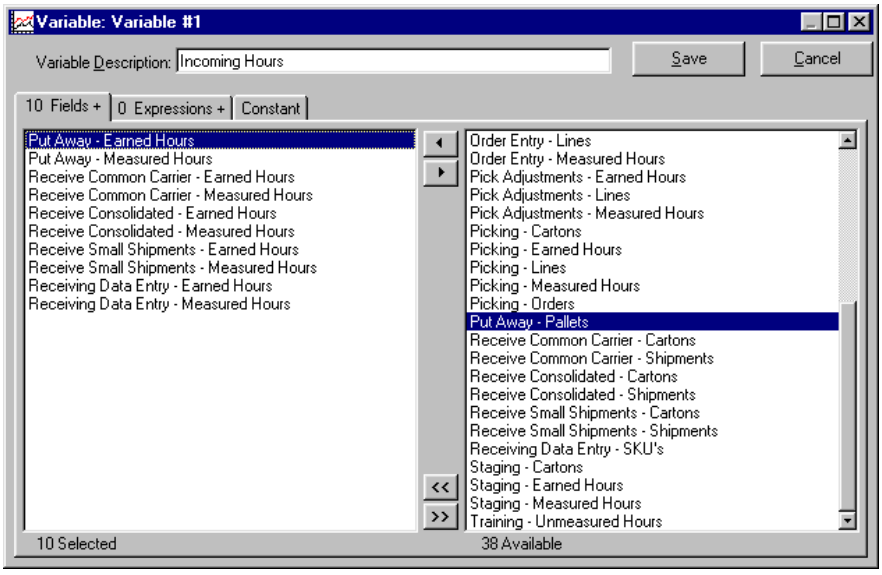


This window allows you to change the chart description and variables.

- The pie chart description is sometimes used as the chart's title depending on the type of data that is displayed.
- The variables are formulas that use datafields from the DataDiary to define what data is charted.

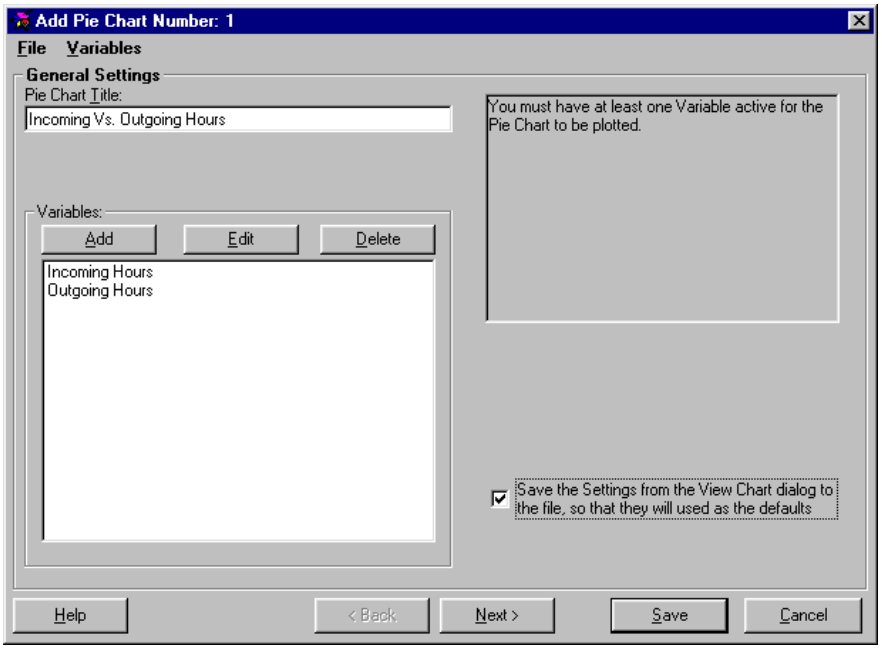
Selecting the Data to be Charted

The data to be charted is selected by setting up variables, that are formulas for units and hours. Setting up variables is the most important part of creating a chart. After selecting the Add or Edit button the following window is displayed.


Variable: Variable #1
Variable Description: Incoming Hours
Save
Cancel
10 Fields +
0 Expressions +
Constant
Put Away - Earned Hours
Put Away - Measured Hours
Receive Common Carrier - Earned Hours
Receive Common Carrier - Measured Hours
Receive Consolidated - Earned Hours
Receive Consolidated - Measured Hours
Receive Small Shipments - Earned Hours
Receive Small Shipments - Measured Hours
Receiving Data Entry - Earned Hours
Receiving Data Entry - Measured Hours
Order Entry - Lines
Order Entry - Measured Hours
Pick Adjustments - Earned Hours
Pick Adjustments - Lines
Pick Adjustments - Measured Hours
Picking - Cartons
Picking - Earned Hours
Picking - Lines
Picking - Measured Hours
Picking - Orders
Put Away - Pallets
Receive Common Carrier - Cartons
Receive Common Carrier - Shipments
Receive Consolidated - Cartons
Receive Consolidated - Shipments
Receive Small Shipments - Cartons
Receive Small Shipments - Shipments
Receiving Data Entry - SKU's
Staging - Cartons
Staging - Earned Hours
Staging - Measured Hours
Training - Unmeasured Hours
10 Selected
38 Available

The variable should be given a description that will appear in the title or legend when the chart is viewed. Next, select the Type of Formula from the pull down list. Then, build a formula by selecting the datafields and expressions. See Chapter 10 Setting up User-Defined Formulas and Expressions for more information.

After the variable is saved the pie charts variable settings are redisplayed.

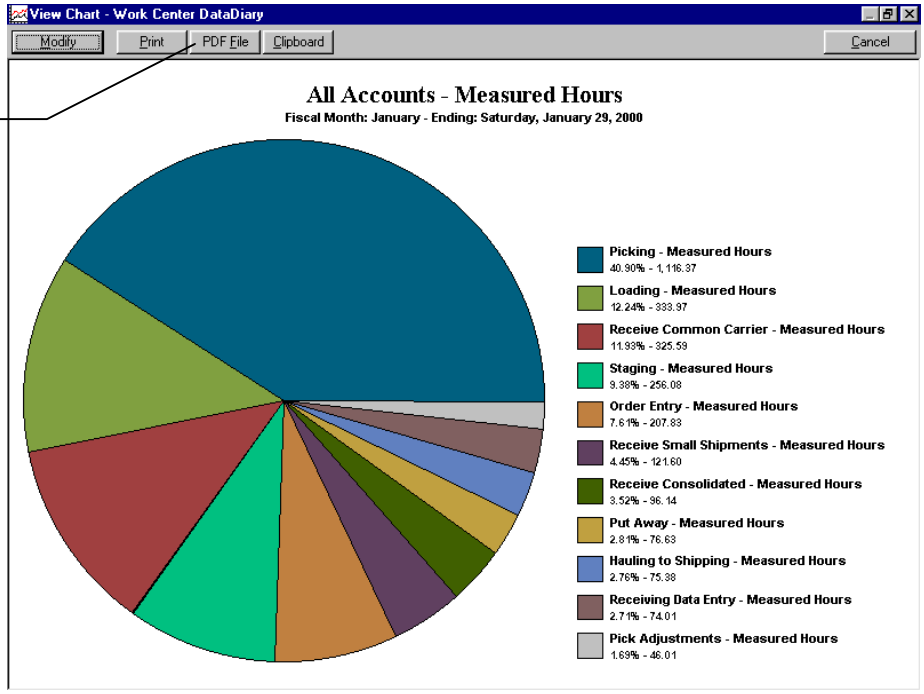


When the Next button is clicked, the View Pie Chart window is displayed. At this point, the process is actually the same as if you were only viewing the chart. However, you will be returned to the Edit Pie Chart window after viewing the pie chart where you can save the chart layout to disk.

Distributing Charts

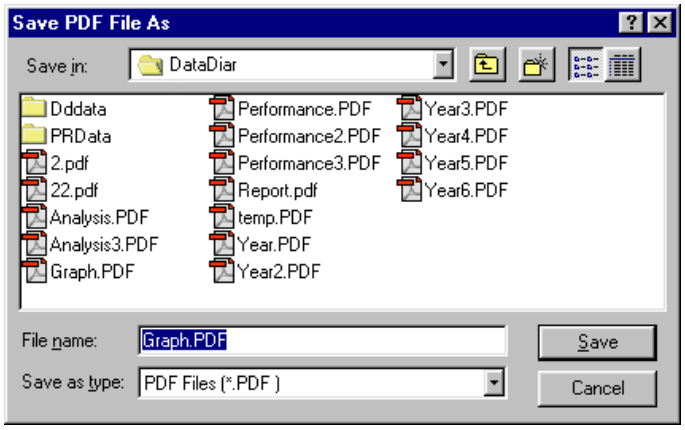
Charts can be saved as a PDF file and distributed electronically with ease. The charts can then be viewed by anyone using the free Adobe Acrobat Reader.

The PDF file button creates a PDF file.



To save the pie chart or graph as a PDF file click the PDF File button.

The save dialog box will be displayed.



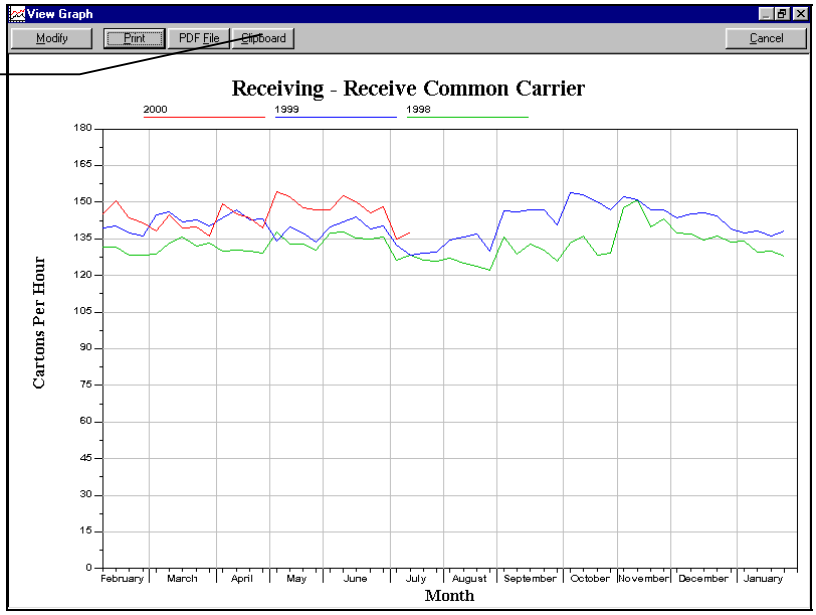
The PDF file can even be shared with others not running ProRep via the web, an intranet, e-mail, or a network.

Note: Unlike the report viewer the file will not be displayed in the PDF viewer. The PDF file must be opened with Adobe Acrobat Reader outside of ProRep.

Copying Charts into Other Applications

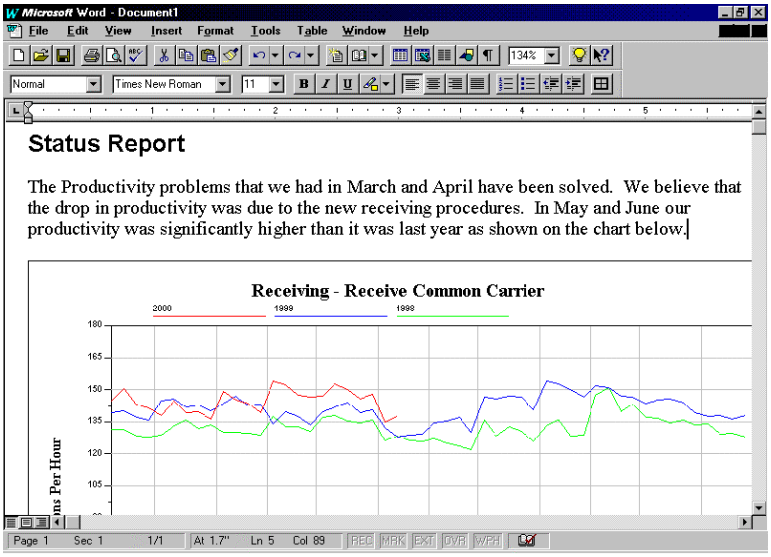
Charts can be "copied" out of ProRep and "pasted" into other applications using the Windows clipboard.

The Clipboard button copies the graph to the windows clipboard.



To copy the chart to the clipboard, click the Clipboard button. When the graph is on the clipboard it can be inserted into other applications such as Microsoft Word or PowerPoint.

Below is a Microsoft Word document with the above line graph pasted into it.



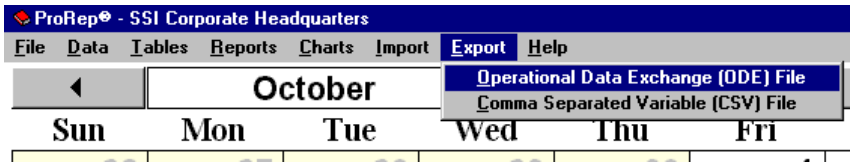
Chapter 17: Exchanging Data with other ProRep Systems

ProRep can exchange data in any of it's DataDiaries with a DataDiary of another ProRep system. This feature is most often used when ProRep is in use in multiple facilities as well as a central office.

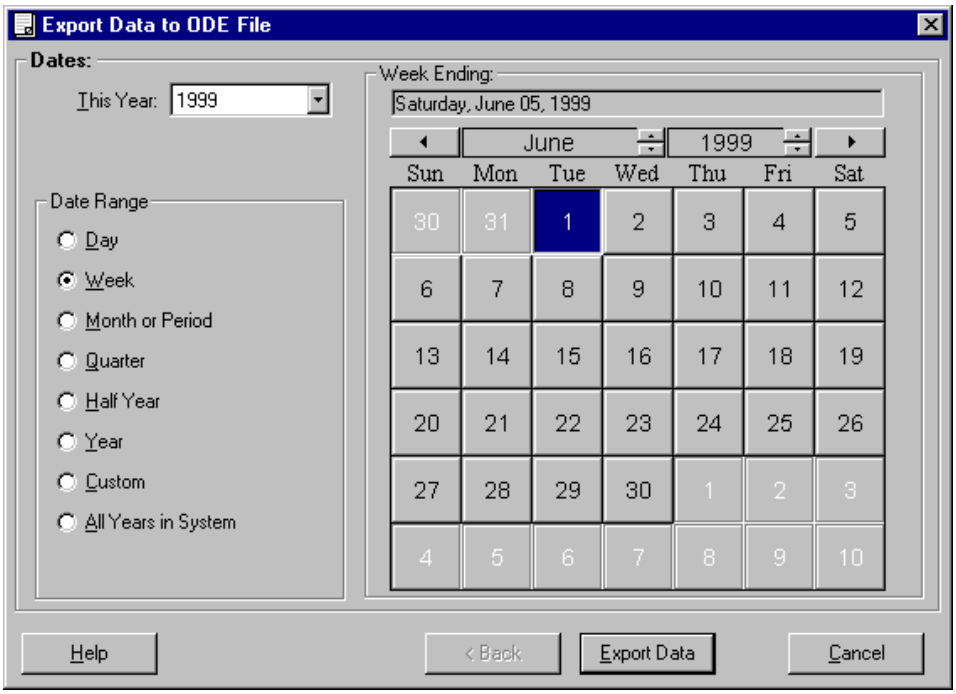
Exporting Data From a ProRep System

Data from the active DataDiary can be exported to another ProRep system's DataDiary via an Operational Data Exchange (ODE) file. ODE files are proprietary files to ProRep and can only be opened in another ProRep system.

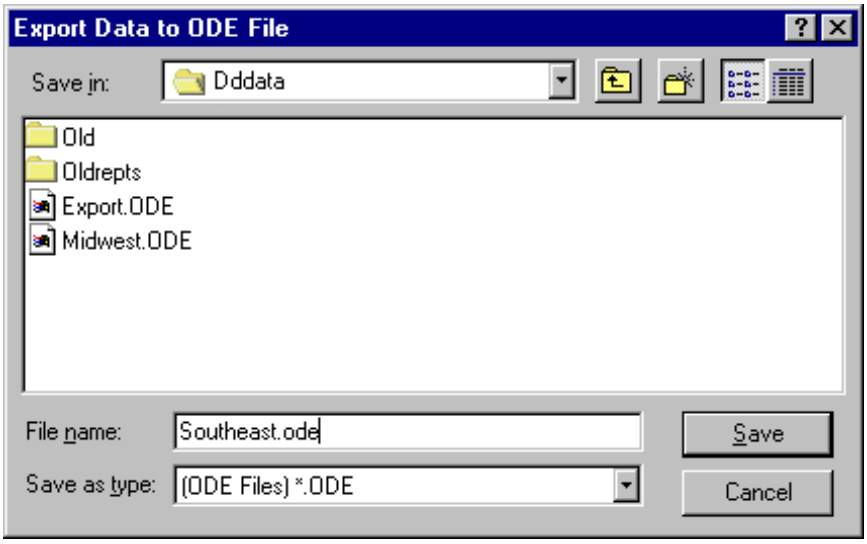
To export data to an ODE file select Export from the menu and click on Operational Data Exchange (ODE) File.



A calendar interface is displayed. It is used to select the length of time for which data is to be exported.



Select the length of time and the time period to be exported and click the Export Data button. In the above example, we selected to export data for the week ending June 5th.

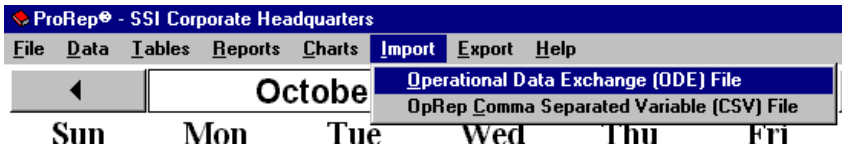


The final step is to select a file name. Our fictitious company has a central office and locations in five different geographic areas. Since the data being exported is the Southeast's, the file name identifies it as such. To finish exporting the file click Save.

Importing Data from another ProRep System

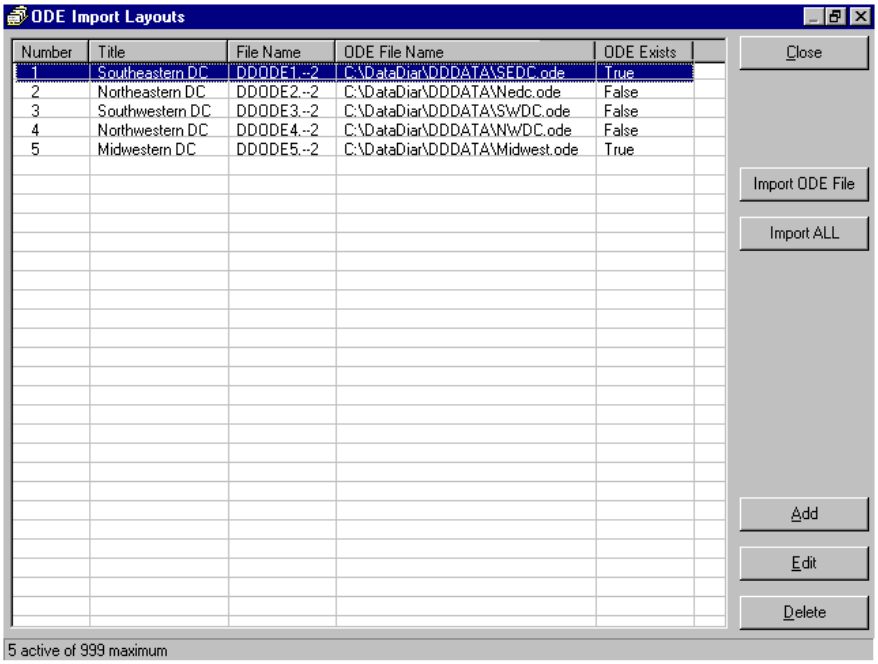
Data from one ProRep DataDiary can be imported into another ProRep DataDiary. To import a file select Import from the menu bar then Operational Data Exchange

(ODE) File. Before importing an ODE file, an import layout file must be defined. An import layout file only needs to be defined once, they are reusable.


ProRep® - SSI Corporate Headquarters
File Data Tables Reports Charts Import Export Help
Operational Data Exchange (ODE) File
OpRep Comma Separated Variable (CSV) File
Octobe
Sun Mon Tue Wed Thu Fri

Creating an ODE Layout

A file must be exported from the remote DataDiary before an ODE layout can be defined. The ODE layout maps the data from the ODE file into the DataDiary. A layout file can be edited once it has been defined.


ODE Import Layouts
Number Title File Name ODE File Name ODE Exists
1 Southeastern DC DDODE1.--2 C:\DataDiar\DDDATA\SEDC.ode True
2 Northeastern DC DDODE2.--2 C:\DataDiar\DDDATA\Nedc.ode False
3 Southwestern DC DDODE3.--2 C:\DataDiar\DDDATA\SWDC.ode False
4 Northwestern DC DDODE4.--2 C:\DataDiar\DDDATA\NWDC.ode False
5 Midwestern DC DDODE5.--2 C:\DataDiar\DDDATA\Midwest.ode True
Close
Import ODE File
Import ALL
Add
Edit
Delete
5 active of 999 maximum

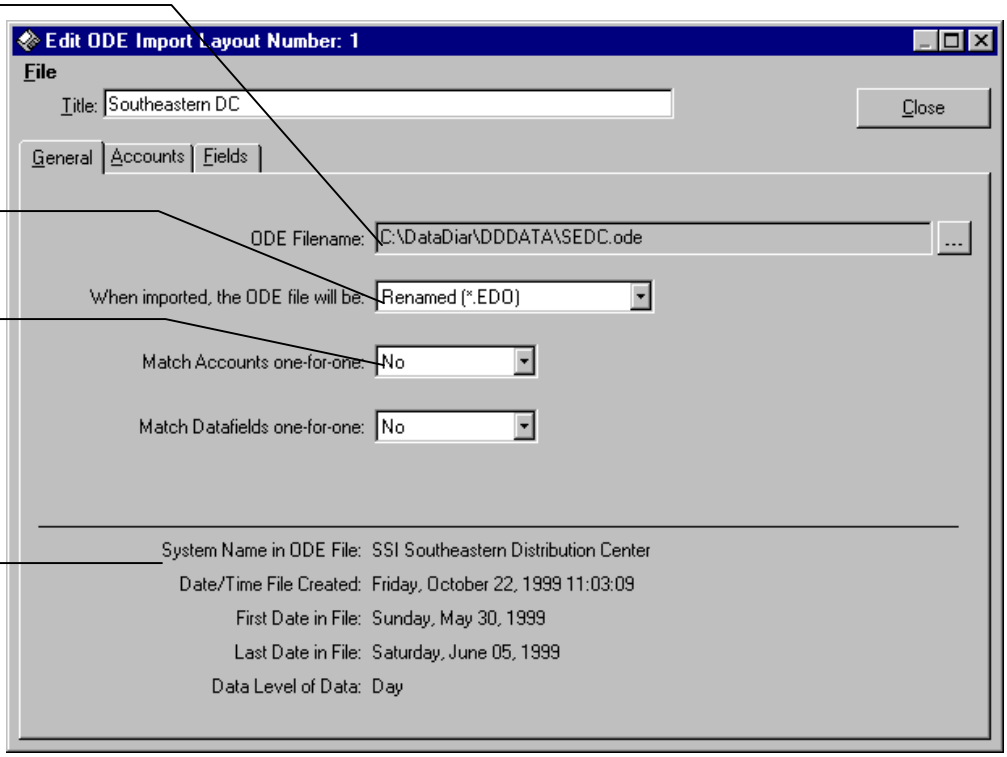
The ODE Import Layout list displays which layouts have been previously defined. To add a new layout, click Add. To edit a layout, highlight it, then click Edit. The Edit ODE Import Layout dialog box is displayed.

The name of the ODE file is listed here. If the import file name is different from the last file imported it can be changed by clicking the button to the right of the filename.

After the ODE file is imported, it can be deleted, renamed or kept.

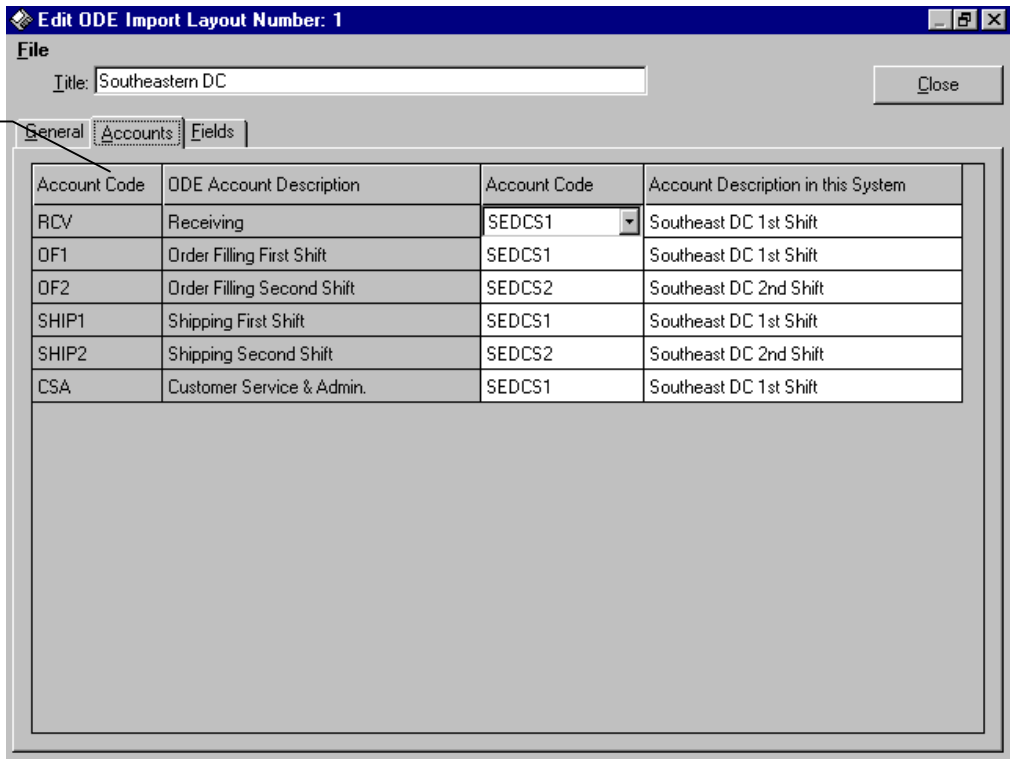
Match Accounts one-for-one and Match Datafields one-for-one can be used when the remote system has the same Accounts or Datafields as the local

Details of the ODE file to be imported are displayed.


Edit ODE Import Layout Number: 1
File
Title: Southeastern DC
Close
General
Accounts
Fields
ODE Filename: C:\DataDiar\DDDATA\SEDC.ode
...
When imported, the ODE file will be: Renamed (*.EDO)
Match Accounts one-for-one: No
Match Datafields one-for-one: No
System Name in ODE File: SSI Southeastern Distribution Center
Date/Time File Created: Friday, October 22, 1999 11:03:09
First Date in File: Sunday, May 30, 1999
Last Date in File: Saturday, June 05, 1999
Data Level of Data: Day

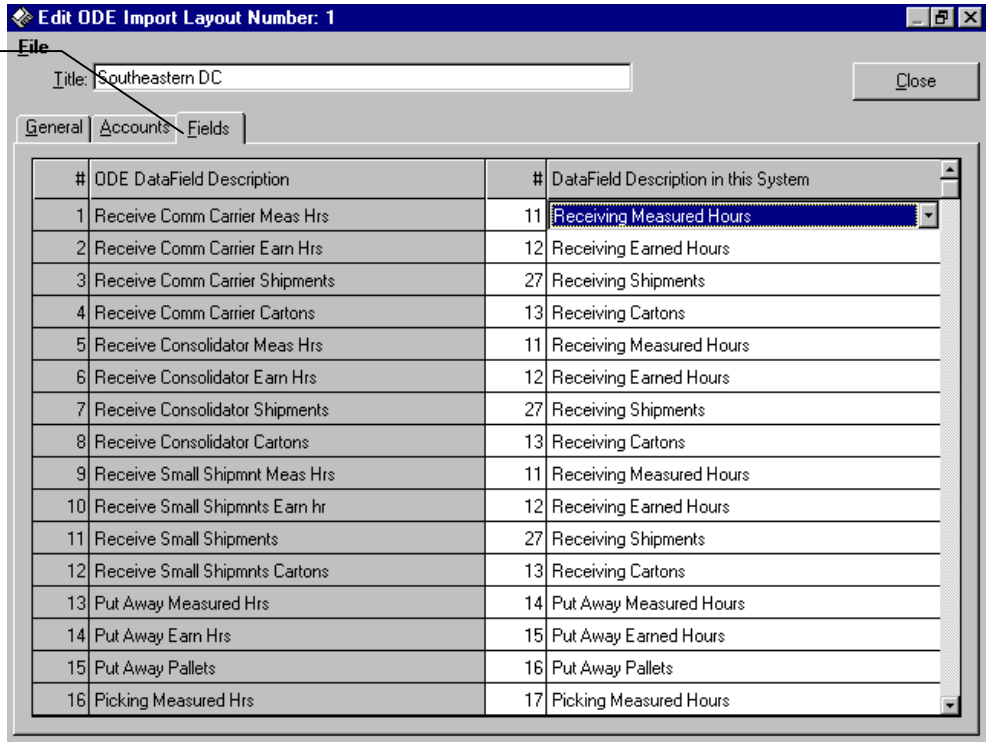
Click on the Accounts tab to continue.

Since most systems will not have the same accounts, the remote system and local systems accounts will need to be matched.


Edit ODE Import Layout Number: 1
File
Title: Southeastern DC
Close
General
Accounts
Fields
Account Code | ODE Account Description | Account Code | Account Description in this System
RCV | Receiving | SEDCS1 | Southeast DC 1st Shift
OF1 | Order Filling First Shift | SEDCS1 | Southeast DC 1st Shift
OF2 | Order Filling Second Shift | SEDCS2 | Southeast DC 2nd Shift
SHIP1 | Shipping First Shift | SEDCS1 | Southeast DC 1st Shift
SHIP2 | Shipping Second Shift | SEDCS2 | Southeast DC 2nd Shift
CSA | Customer Service & Admin. | SEDCS1 | Southeast DC 1st Shift

When an ODE file Import layout is defined, the accounts from the remote system should be mapped to the corresponding accounts in the local system. If both systems have the same account names, a setting on the general tab will match the accounts one-for-one. All accounts do not have to be mapped. Although, at least one account must be mapped to import any data.

The Datafields must be matched for the data to be imported.



#	ODE DataField Description	#	DataField Description in this System
1	Receive Comm Carrier Meas Hrs	11	Receiving Measured Hours
2	Receive Comm Carrier Earn Hrs	12	Receiving Earned Hours
3	Receive Comm Carrier Shipments	27	Receiving Shipments
4	Receive Comm Carrier Cartons	13	Receiving Cartons
5	Receive Consolidator Meas Hrs	11	Receiving Measured Hours
6	Receive Consolidator Earn Hrs	12	Receiving Earned Hours
7	Receive Consolidator Shipments	27	Receiving Shipments
8	Receive Consolidator Cartons	13	Receiving Cartons
9	Receive Small Shipmnt Meas Hrs	11	Receiving Measured Hours
10	Receive Small Shipmnts Earn hr	12	Receiving Earned Hours
11	Receive Small Shipments	27	Receiving Shipments
12	Receive Small Shipmnts Cartons	13	Receiving Cartons
13	Put Away Measured Hrs	14	Put Away Measured Hours
14	Put Away Earn Hrs	15	Put Away Earned Hours
15	Put Away Pallets	16	Put Away Pallets
16	Picking Measured Hrs	17	Picking Measured Hours

Datafields will have to be mapped. This procedure is the same as used for accounts. If both systems use the same datafields a checkbox on the General tab will match the datafields one-for-one.

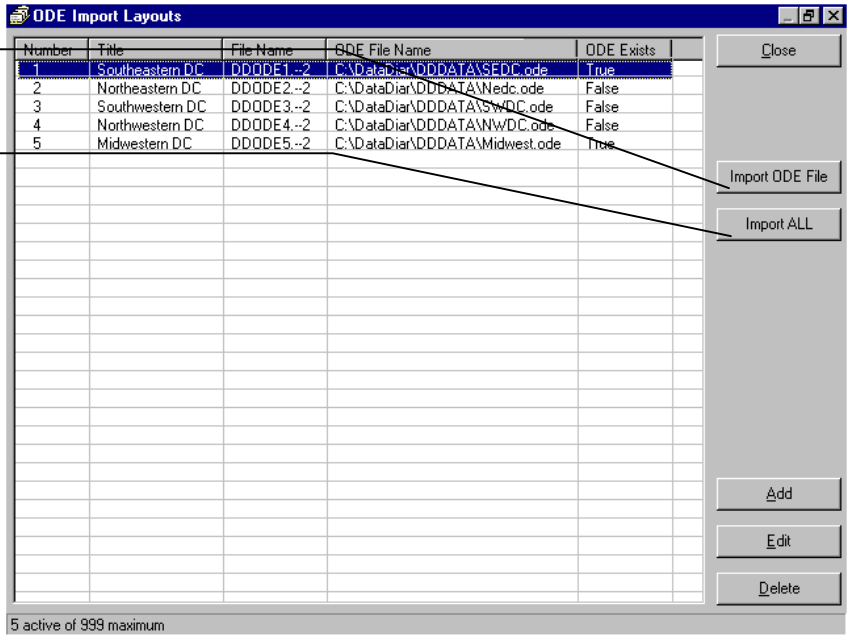
When all desired accounts and datafields have been mapped, the layout file is complete. Click the save button.

Importing an ODE File

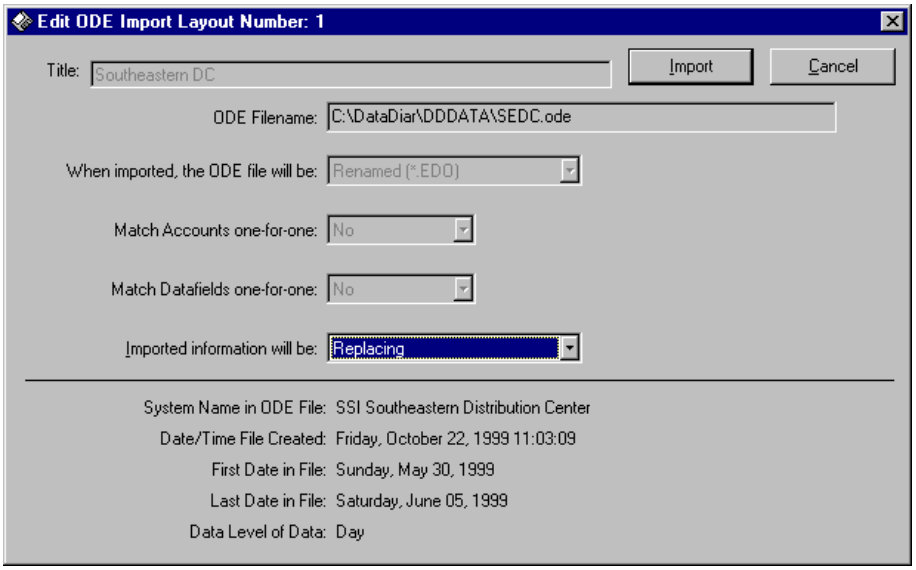
ODE files are imported from the window that lists the ODE Import Layouts. To import a single file highlight the file name and click Import ODE File. All existing ODE files can be imported at once by simply clicking the Import All button

To import the highlighted file click Import ODE File.

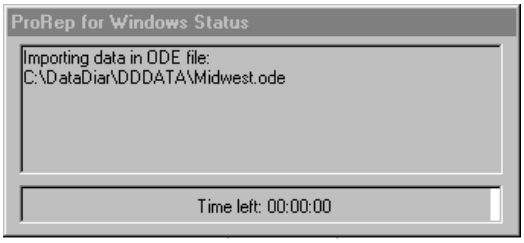
To import all ODE files click Import All.



When the import button is clicked, details of the import file are displayed.


Edit ODE Import Layout Number: 1
Title: Southeastern DC
Import
Cancel
ODE Filename: C:\DataDiar\DDDATA\SEDC.ode
When imported, the ODE file will be: Renamed (*.EDO)
Match Accounts one-for-one: No
Match Datafields one-for-one: No
Imported information will be: Replacing
System Name in ODE File: SSI Southeastern Distribution Center
Date/Time File Created: Friday, October 22, 1999 11:03:09
First Date in File: Sunday, May 30, 1999
Last Date in File: Saturday, June 05, 1999
Data Level of Data: Day

If the details of the ODE file are not correct on this screen the Import process can be stopped without changing any data. If all the information is correct click import to import the file.



A status window will be displayed while the file is importing. When this disappears the file has been imported.

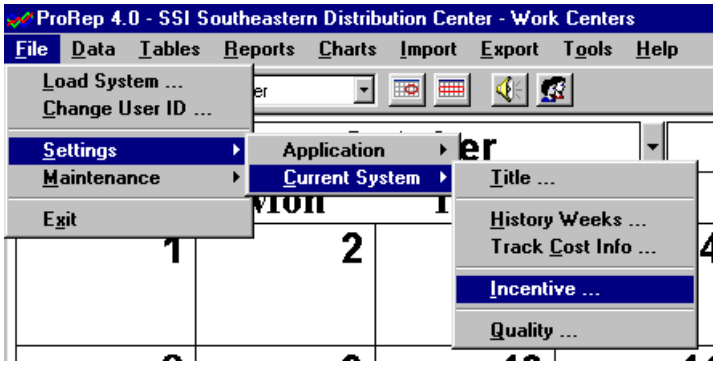
Appendix A: Using the Incentive Features

The Incentive Module is an optional software module that is enabled through the ProRep software license key. The proper license key will activate the incentive features. A license for the incentive module can be obtained at any time, it is not necessary that it is enabled when a system is first set up.

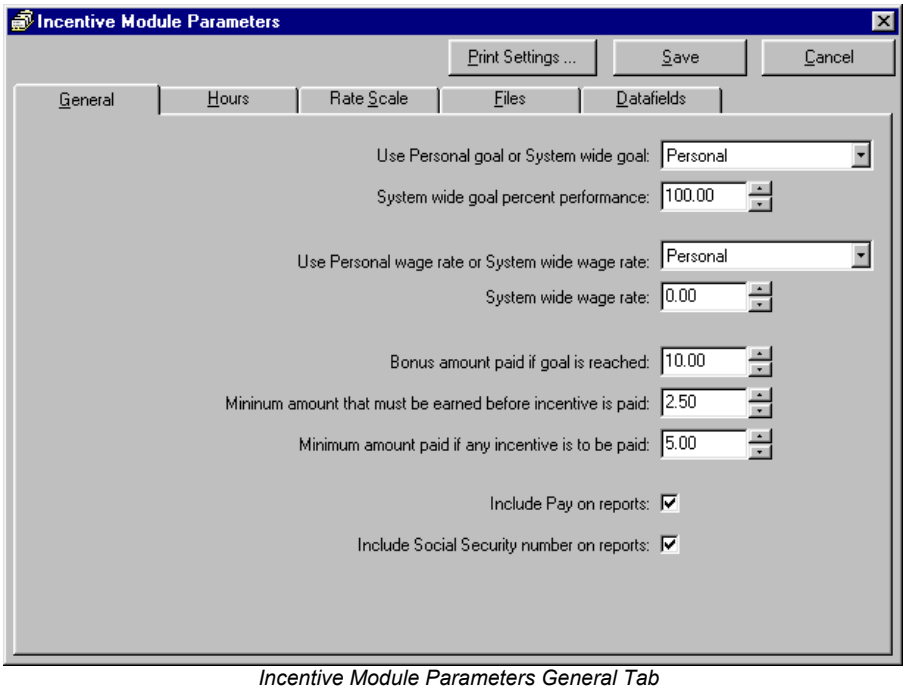
To determine if the incentive module is enabled, from the menu bar select File, Settings, Application, License Key. The ProRep software registration information is displayed that indicates which optional modules are included.

Incentive Module Parameters

To review or change the incentive module parameters, from the main menu select Files, Settings, Current System, Incentive.



The existing incentive parameters are displayed.



Incentive Module Parameters General Tab

Specifying if Associates Have the Same or Different Incentive Goals

To specify that the percent performance used as the incentive goal is the same for all associates, from the Use Personal goal or System wide goal pull down list, select System. Then in the System wide goal percent performance field enter the goal.

To specify that the percent performance used as the incentive goal is different for each associate, from the Use Personal goal or System wide goal pull down list, select Personal. To set each associate's performance goal, edit the associate's entry in the associate table and on the Incentive tab, enter the goal.

Specifying if Incentive Pay is Based on Associate Pay Rates or a Fixed Rate

To specify that every associate's incentive pay is calculated using the same pay rate, from the Use Personal wage rate or System wide rate pull down list select System. Then in the System wide wage rate field, enter the pay rate.

To specify that each associate's incentive pay is calculated using their own rate, from the Use Personal wage rate or System wide rate pull down list select Personal. To set each associate's rate, edit the associate's entry in the associate table and on the Payroll tab, enter the rate in the Hourly Cost field.

Paying a Bonus for Reaching the Goal

A specific monetary amount can be paid to associates that reach the incentive goal. This is commonly called a bonus. The bonus can be in place of or in addition to the

normal incentive pay. To pay a bonus, in the Bonus amount if goal is reached field, enter the amount.

Options for Handling the Payment of Small Incentive Amounts

When an associate's performance is slightly over the goal, the calculated earned incentive pay may be so small that it is not worthwhile to actually process the payment. There are two setting on the General tab that control the actual amount of money paid to the associate.

Minimum amount that must be earned before incentive is paid

Is used to avoid making a payment for small incentive amounts. For example, if the minimum amount that must be earned is $2.00, associates with an incentive amount of $1.99 or less are not paid any incentive.

Minimum amount that is paid if any incentive is paid

Increases any calculated earned incentive amount up to this minimum amount. Continuing with our example above, if the minimum payment is $5.00, associates with an earned incentive of at least $2.00 but less than $5.00 are increased to a $5.00 incentive payment.

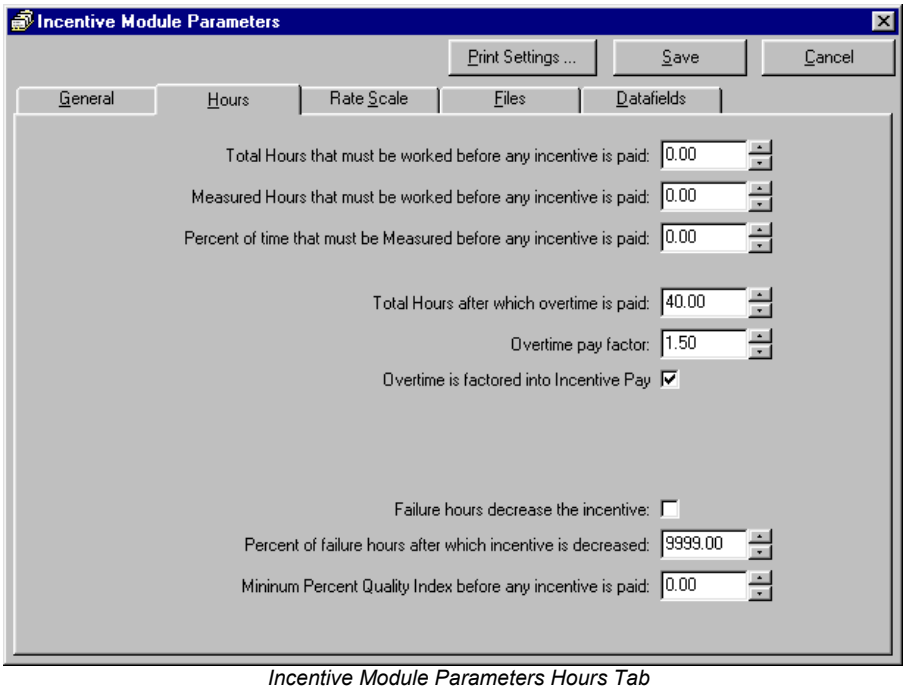
Not Including Pay on Incentive Reports

By default, actual incentive pay is shown on the incentive reports. To not show pay, check the Include Pay on reports check box.

Using Social Security Numbers instead of Associate Numbers

Either ProRep associate numbers or social security numbers can appear on the reports and in the files that can be created. To use social security numbers, check the Include Social Security numbers on reports check box.

Clicking on the Hours tab displays the following settings:



Incentive Module Parameters Hours Tab

Excluding Associates from Incentive Pay Based on the Number of Hours Worked

Three parameters on the Incentive Module Parameters Hours tab are hurdles based on the hours worked that must be meet by an associate to be paid an incentive.

Total Hours that must be worked before an incentive is paid - Is used to prevent paying an incentive to associates who have been absent an unacceptable amount of time.

Measured Hours that must be worked before any incentive is paid - Is used to prevent paying an incentive to associates who are supposed to primarily perform measured activities that "dump" their time into unmeasured activities in order to increase their performance and incentive pay. The following parameters can be used in conjunction with or in place of this parameters.

Percent of time that must be Measured before any incentive is paid - Is used to prevent paying an incentive to associates who are supposed to primarily perform measured activities that "dump" their time into unmeasured activities in order to increase their performance and incentive pay.

Controlling How Overtime Affects Incentive Pay

Three parameters on the Incentive Module Parameters Hours tab control how overtime impacts incentive pay. Labor laws usually require that incentive pay amounts are increased in proportion to the amount of overtime that is worked.

Total Hours after which overtime is paid - The total paid hours after which all hours worked are overtime hours. Usually, this is the 40 hours per week.

Overtime pay factor - This is the factor by which an associates pay rate is increased when they are working overtime. Usually, this is 1.5 times their normal pay rate.

Overtime is factored into incentive pay - Increases incentive pay in proportion to the percent of overtime hours. Usually, this box is checked.

Example of factoring overtime into incentive pay

Pay Rate: $8.00
Regular Hours: 40.00
Overtime Hours: 6.00
Total Hours: 46.00
Incentive Hours: 5.00

Total Pay = $392.00 ((40 Regular Hours x $8.00 per Hour) + (6.00 Overtime Hours x ($8.00 x 1.5 Overtime Factor))

Average Pay Rate Including Overtime = $8.52 ($392.00 Total Pay / 46 Total Hours)

Incentive Pay = $42.60 (5.00 Incentive Hours x $8.52 Average Pay Rate Including Overtime)

Factoring Quality Failures into Incentive Pay

Three parameters on the Incentive Module Parameters Hours tab determine if incentive pay is decreased or prevented as a result of ProRep's quality feature's failure hours.

Failure hours decrease the incentive - Checking this box will result in the associate's quality failure hours being subtracted from their earned hours. The result is that the associate's percent performance for incentive purposes is reduced by the amount of quality failure hours. ProRep's quality features must be enabled in order to reduce incentive based on quality results. The calculation of failure hours are controlled by settings associated with the types of work.

Percent of failure hours after which incentive is decreased - The percent of mistake hours is calculated as a percent of the earned hours. If the percent of mistake hours is greater than the percent set for this parameter, the incentive hours (earned hours) are reduced by the mistake hours that are in excess of this percent.

Example of factoring quality failure hours into incentive pay

% Failure Hours Allowed: 5%
Failure Hours: 3.25
Earned Hours: 40.25
Incentive Hours: 8.75

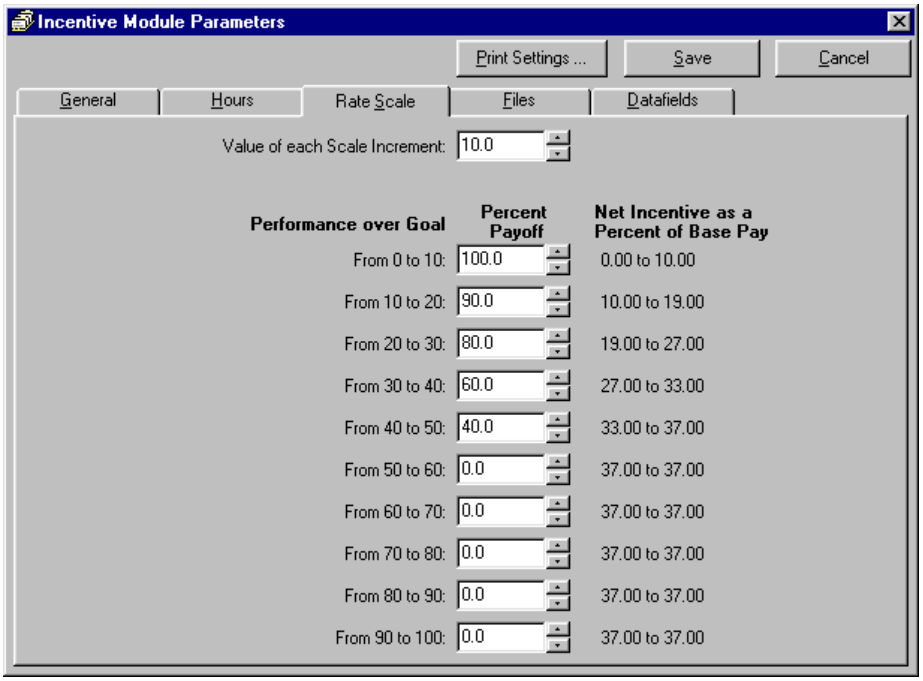
Allowed Failure Hours = 2.01 (40.25 Earned Hours x 5% Failure Hours Allowed)

Excess Failure Hours = 1.24 (3.25 Failure Hours - 2.01 Allowed Failure Hours)

Quality Adjusted Incentive Hours = 7.51 (8.75 Incentive hours - 1.24 Excess Failure Hours)

Minimum Percent Quality Index before any incentive is paid - If the associate's quality index is less then the percent specified for this parameter, no incentive is paid.

Clicking on the Rate Scale tab displays the following settings:


Incentive Module Parameters
Print Settings ...
Save
Cancel
General
Hours
Rate Scale
Files
Datafields
Value of each Scale Increment: 10.0
Performance over Goal
Percent Payoff
Net Incentive as a Percent of Base Pay
From 0 to 10: 100.0 0.00 to 10.00
From 10 to 20: 90.0 10.00 to 19.00
From 20 to 30: 80.0 19.00 to 27.00
From 30 to 40: 60.0 27.00 to 33.00
From 40 to 50: 40.0 33.00 to 37.00
From 50 to 60: 0.0 37.00 to 37.00
From 60 to 70: 0.0 37.00 to 37.00
From 70 to 80: 0.0 37.00 to 37.00
From 80 to 90: 0.0 37.00 to 37.00
From 90 to 100: 0.0 37.00 to 37.00

Incentive Module Parameters Rate Scale Tab

Controlling the Incentive Payoff Rate

The rate scale determines the amount of incentive that is actually paid at a given level of performance over the goal. The rate scale allows for graduated payoffs. The rate scale has 10 increments of percent performance above the goal. The amount of performance above the goal that each increment represents is specified by the setting for the Value of each Scale Increment. Each increment can have a different percentage payoff for the performance above the goal that falls into the range of the increment.

Example of how the incentive pay is calculated using the Rate Scale

Pay Rate: $8.00
Measured Hours: 35.00
Earned Hours: 40.25
Incentive Goal: 90%

Actual Performance = 115% (40.25 Earned Hours / 35.00 Measured Hours)

Percentage Points Over Goal = 25% (115% Goal - 90% Performance)

Earned Hours Goal = 31.50 (35.00 Measured Hours x 90% Goal)

Incentive Hours = 8.75 (40.25 Earned Hours - 31.50 Earned Hours Goal)

Number of Increments = 2.5 (25% Over Goal / 10% Percentage Points per Increment)

Incentive Hours per Increment = 3.50 (8.75 Incentive Hours / 2.5 Hours per Increment)

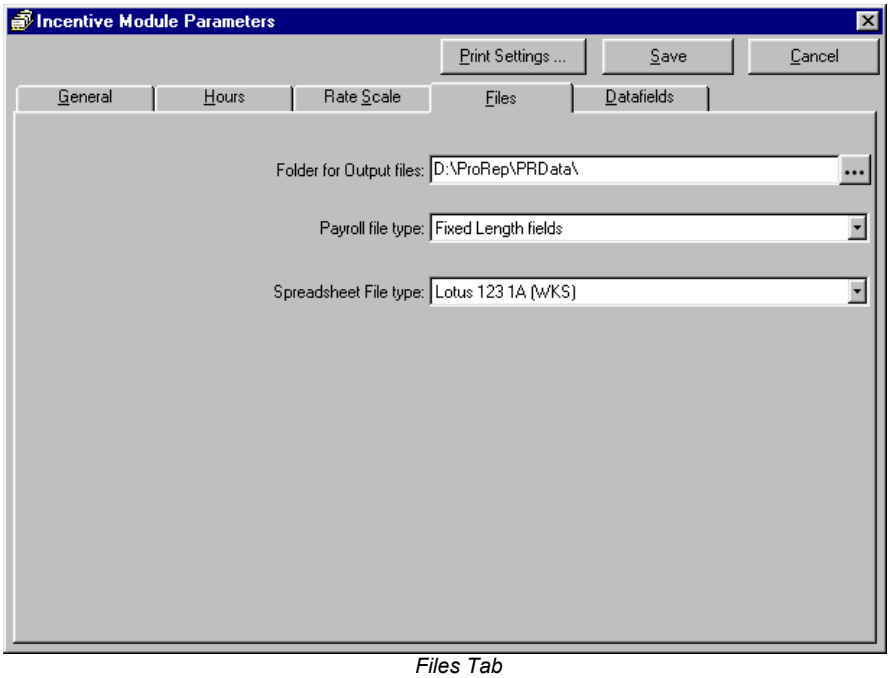
Incentive Pay = $64.40 (shown below)

$8.00 per Hour x 3.50 Incentive Hours in the Increment x 100% Payoff = $28.00
$8.00 per Hour x 3.50 Incentive Hours in the Increment x 90% Payoff = $25.20
$8.00 per Hour x 1.75 Incentive Hours in the Increment x 80% Payoff = $11.20
8.75 Incentive Hours **$64.40**

Capping the Incentive Payoff

The incentive payoff can be capped at any percentage increment above the goal so that the associate receives no incentive pay for performance at or above that increment. To cap incentive payoff at starting at an increment, set the increment's Payoff Percent to 0% and set all increments after this increment to 0% payoff.

Clicking on the Files tab displays the following settings:



Files Tab

Creating a File with Incentive Pay Data for Payroll

When an incentive report is printed, a choice can be made to create a file that contains incentive pay data. The file can be formatted as either a Fixed Length file or a Comma Separated Values file. To select the type of file that can be created choose one of the selections from the Payroll file type pull down list. The name of the file that is created is PAYCALC.DAT. The setting for Folder for Output files determines the folder in which the file is created.

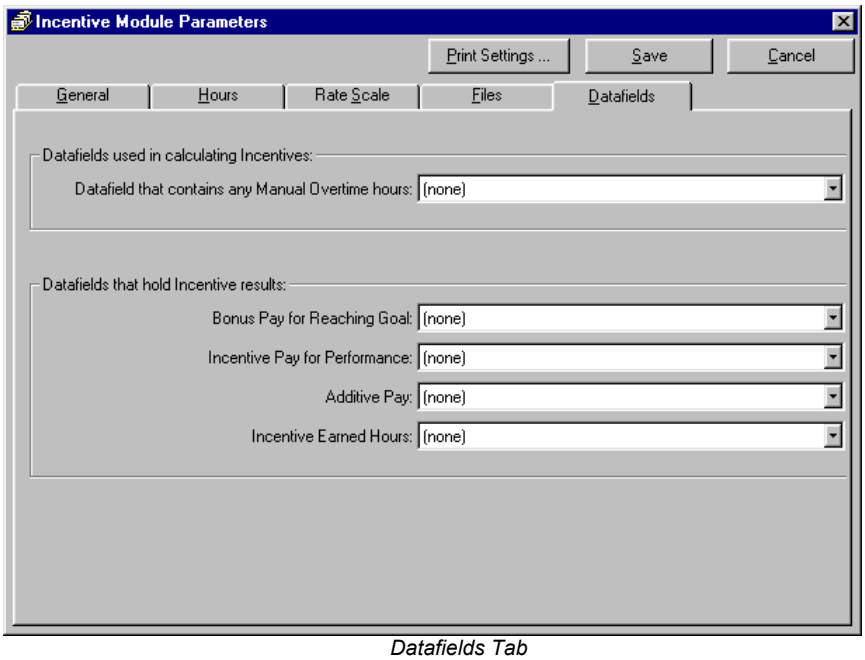
The fields in the Comma Separated Values file are separated by commas and the character fields are also enclosed in quotes. Both the CSV and Fixed Length records end with a carriage return and line feed, ASCII codes 13 and 10.

Record Layout of PAYCALC.DAT				
Description	**Type**	**Starting Position**	**Length**	**Decimal Places**
Associate Number	Character	1	17	
Associate Name (last, first)	Character	18	31	
Home work center code	Character	49	10	
Regular Hours	Numeric	59	10	2
Overtime Hours	Numeric	69	10	2
Incentive hours (earned hours in excess of goal)	Numeric	79	10	2
Wage rate per hour	Numeric	89	10	2
Overtime wage rate per hour	Numeric	99	10	2
Incentive pay rate per hour	Numeric	109	10	2
Regular pay	Numeric	119	10	2
Overtime pay	Numeric	129	10	2
Incentive Pay	Numeric	139	10	2

Creating a Spreadsheet File with Incentive Pay Results

When an incentive report is printed, a choice can be made to create a file that contains incentive pay data. The type of spreadsheet file that is created is chosen from the Spreadsheet File type pull down list. The setting for Folder for Output files determines the folder in which the file is created.

Clicking on the Datafields tab displays the following settings:



Datafields Tab

Using Manually Calculated Overtime Hours when Calculating Incentive Pay

ProRep can automatically calculate the number of overtime hours based on the associate's total hours for the week. For example, all hours over 40 hours per week are overtime.

If additional or alternative methods are used to calculate overtime, and they are to be used when calculating incentives, the overtime hours must be entered into a user-defined datafield. For example, all hours worked over 8 hours per day are overtime.

To specify the user-defined datafield that contains the manually calculated overtime, select the datafield from the Datafield that contains any Manual Overtime hours pull down list.

Tracking the Incentive Calculation Results in the DataDiaries

The incentive calculation results can be held in the associate and work center DataDiaries. When an incentive report is printed, the results can be put into user-defined datafields. After the user-defined datafields are set up, they can be selected from pull down lists for each of the following items:

Bonus Pay for Reaching Goal - The fixed amount that is paid to associates that meet or exceed the goal.

Incentive Pay for Performance - The portion of the incentive pay that is based on the actual performance over the performance goal.

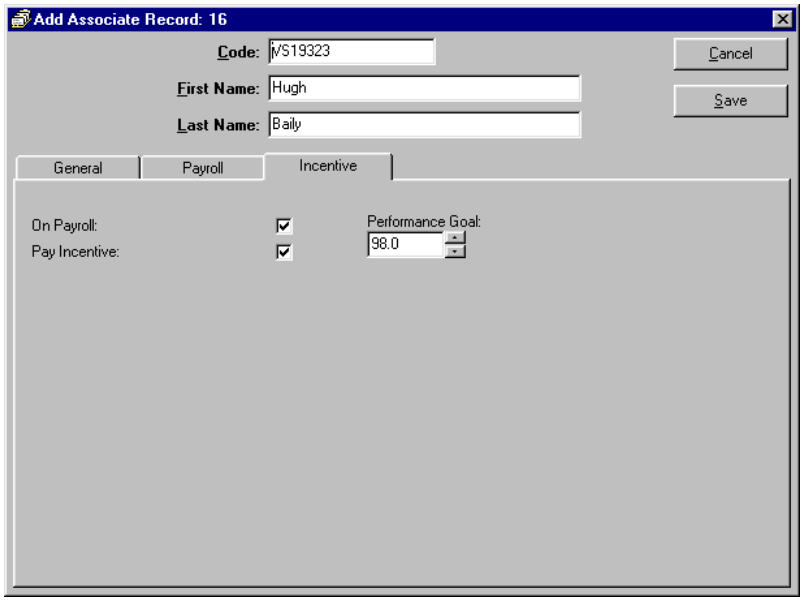
Additive Pay - The portion of the incentive pay that is not based on performance but based paying on an extra amount per hour for working on specified activities. For more information, see the section in *Chapter 7: Setting Up Activities* titled *Paying an Additional Incentive that is not Based on Performance*.

Incentive Earned Hours - The earned hours that are above the incentive earned hours goal.

Associate Table Settings Related to Incentives

Some settings related to incentives are specified separately for each associate. To specify these settings, maintain the associate table.

Below is the associate record's Incentive tab:



Not Including the Associate on the Incentive Payroll Report - By default, all associates are included on the incentive payroll reports. If there is an associate such as a working supervisor whose pay is considered confidential, they can be excluded from the report by un-checking the On Payroll check box.

Making an Associate Ineligible for Incentive Pay - By default, all associates are eligible for incentive pay. Depending on an organization's policies, an associate such as a working or salaried supervisor may not be eligible for incentive. If this associate performs only non-measured activities, they are not working on activities that could result in an incentive pay. However, if this associate performs activities that are measured, the default is to calculate incentive pay. To prevent the associate from getting an incentive, un-check the Pay Incentive check box.

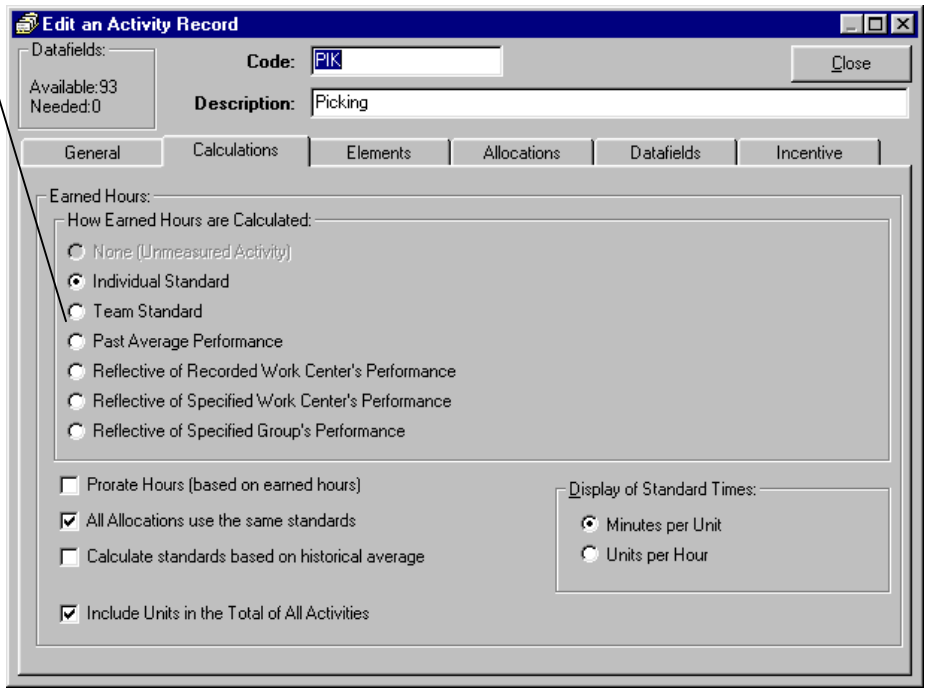
Specifying the Associate's Incentive Performance Goal - The percent performance that must be met before an associate earns an incentive can either be a system wide goal or a unique personal goal for each associate. If personal performance goals are being used, enter the percent in the Performance Goal box.

Activity Table Settings Related to Incentives

Some settings related to incentives are specified separately for each activity. To specify these settings, maintain the activity table.

Below is the activity record's Incentive tab:

To make the performance for this activity the same as the associate's past average performance, click the past average radio button.



Paying Incentive based on the Associate's Past Performance - If an associate who normally earns an incentive by working on activities with standards is assigned to an activity that does not have a standard, they can get earned hours for the activity in proportion to their normal performance. This type of activity is called a past average activity.

For example, an associate usually works on activities with standards such as picking and shipping. This associate is usually a high performer and regularly earns an incentive. Recently, several new hires have been added for peak season. The associate is asked to train the new hires. To keep this associate from suffering a loss in incentive pay, a training activity should be set up with the earned hours calculation set to past average.

To specify that earned hours for an activity are calculated at the associate's past average performance, on the Calculations tab, in the How Earned Hours are Calculated section, click the radio button for Past Average Performance.

Past average performance is based on the associate's short term average. The default value for the short term average is the past 6 weeks.

Calculating Performance for a Support Activity - If an associate is working on a support activity that does not have a standard, they can get earned hours for the activity that are based on the total performance of one or more work centers. This type of activity is called a reflective activity. This feature is usually only used with an incentive system.

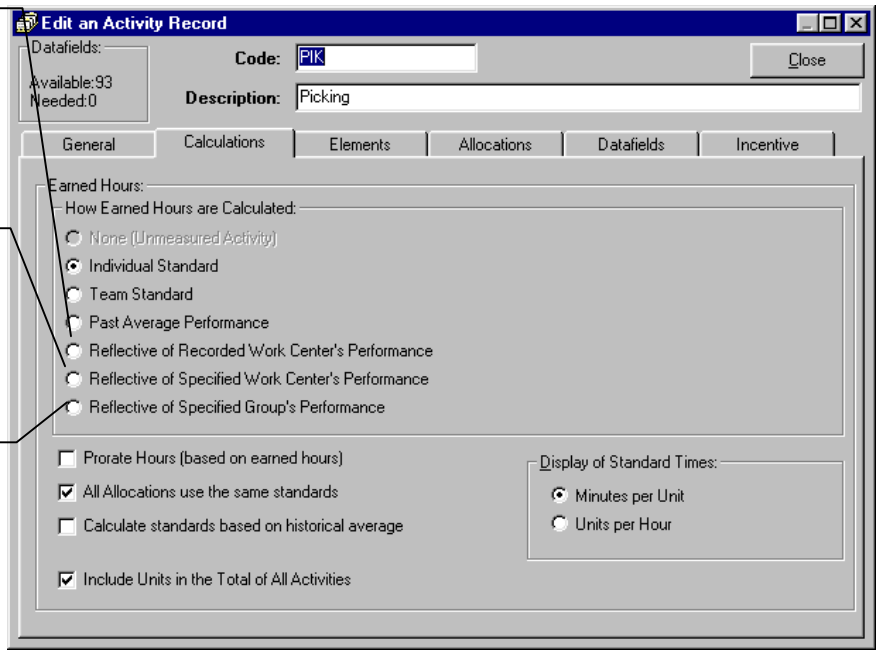
For example, an associate works primarily as a general material handler in a packing area. This job includes bringing supplies to the packing stations, distributing work to the packers and other miscellaneous tasks. It is not practical to set a standard for the job. However, performance of the job impacts the performance of the packers and overall productivity of the operation. Therefore, we would like pay the material handler an incentive when performance of the area is above the goal. This is done by specifying that the earned hours for the material handling activity is reflective of the work center. Therefore if the work center performs at 110%, the associate will receive earned hours based on a 110% performance for the time they spent on material handling.

To specify that earned hours for an activity are calculated based on the performance of a work center or group, on the Calculations tab, in the How Earned Hours are Calculated section, click a radio button for one of the three types of Reflective calculations.

Recorded Work Center: *Earned hours are calculated based on the performance of the work center in which the associate performs the reflective activity.*

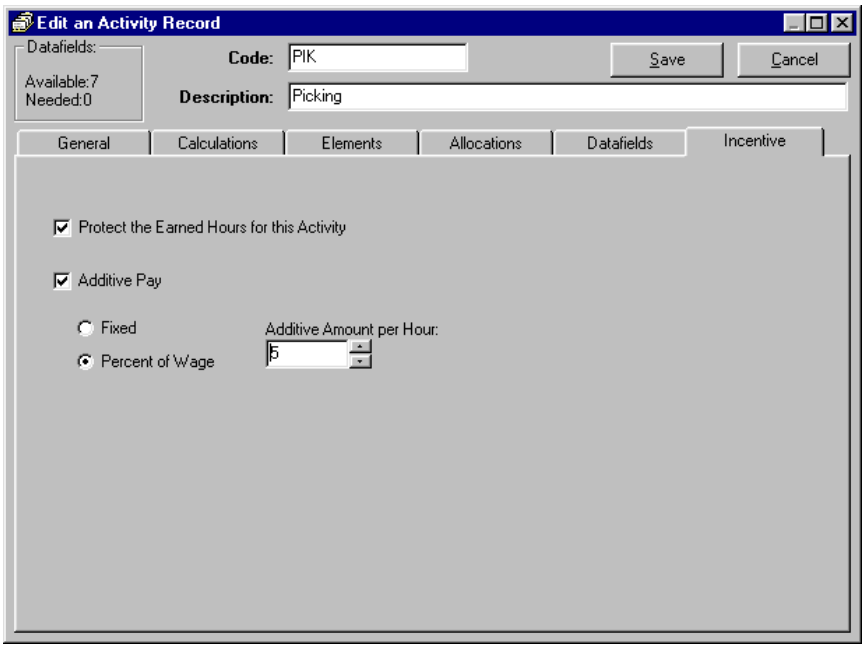
Specified Work Center: *Earned hours are calculated based on the performance of a specific work center associated with the reflective activity.*

Specified Group: *Earned hours are calculated based on the performance of a specific group of work centers associated with the reflective activity*



If a specified work center or group is selected, a pull down list of work centers or groups is displayed from which a choice is made.

Below is the activity record's Incentive Tab:



Using the Greater of the Goal or Actual Performance for Incentive Pay - In some situations, an associate may be asked to perform an activity for which they have not been trained and have little experience. If the job requires a significant amount of training or experience to master, it might take a few weeks or months for the associate to perform this new activity at their prior rate of performance. Therefore, while learning this activity they would probably not earn a consistent incentive. In fact, the performance on the new task could negate good performance on other activities.

To solve this situation, a new activity, used only during training, can be set up for which the associate's performance is either the greater of the actual performance or the incentive performance goal. The result would be that if the associate performed above goal they would get incentive, but if they performed below goal it would have no negative impact on incentive that they might earn on other activities. To make this selection, check the box next to Protect the Earned Hours for this Activity.

Caution: This is a seldom used feature that should be used judiciously. There are alternative ways to prevent incentive pay from being negatively impacted. The earned hours calculation can be set to None or to Past Average Performance.

Paying an Additional Incentive that is not Based on Performance - In some situations, it is desirable to always pay an associate an extra amount for performing certain activities. For example, an experienced associate normally works on activities for which they do well and therefore earn incentive pay. A new associate is hired and the experienced associate is asked to train the new associate. During the time that they are training the new associate the experienced associate is working on the unmeasured activity of Trainer and therefore has no chance of earning incentive pay.

Obviously, the experienced associate might be reluctant to train new associates if it means loosing incentive pay. To solve this situation, the Trainer activity can be set up so that associates are paid an extra amount per hour for training other associates.

To pay an additional amount per hour while working on an activity, on the Incentive tab check the box next to Additive Pay. If the extra pay is a specific amount per hour, click the Fixed radio button and in the Additive Amount per Hour box enter

the monetary amount. If the extra pay is to be a percent of the incentive pay rate, click the Percent of Wage radio button and in the Additive Amount per Hour box enter the percentage.

Calculating Incentives and Printing the Reports

After week end processing is run for the current week, the Incentive Calculation Report can be printed for the week. When the report is printed, the incentive amounts are calculated. Optionally, incentive reports are printed, a spreadsheet file is created and a payroll file is created.

The Incentive Calculation Summary Reports lists one line of information per associate. One report is printed in alphabetical order. A second report is printed in associate performance order.

Incentive Date: Saturday, September 23, 2000

SSI Southeastern Distribution Center

Incentive Calculation Report

Summary

Name	Code	Goal %	Perfor-mance	Net Perfor-mance	Total Hrs	Direct Hrs	Earned Hrs Goal	Adj. Earned Hrs	Incentive Hrs	Pay Rate	Incentive Pay	Additive Pay	Net Incen-tive Pay
Baxter, Linda	C11131	100.0	101.6	101.6	40.01	32.98	32.98	33.50	0.52	7.80	4.06	0.00	4.06
Bell, William	C23433	100.0	98.4	98.4	36.65	28.45	28.45	28.00	0.00	8.35	0.00	0.00	0.00
Boggs, Charlie	A12456	100.0	95.7	95.7	40.01	37.51	37.51	35.90	0.00	7.15	0.00	0.00	0.00
Carona, Maria	A21234	100.0	91.8	91.8	39.31	35.02	35.02	32.15	0.00	9.50	0.00	0.00	0.00
Gonzalez, Jose	T43267	100.0	96.7	96.7	40.00	37.50	37.50	36.25	0.00	7.85	0.00	0.00	0.00
Grubbs, John	C76354	100.0	100.0	100.0	40.00	37.50	37.50	37.50	0.00	6.87	0.00	0.00	0.00
Hanley, Ruth	A62215	100.0	79.5	79.5	39.99	37.24	37.24	29.59	0.00	6.35	0.00	0.00	0.00
McGuire, Carter	A39987	100.0	97.4	97.4	38.09	29.70	29.70	28.92	0.00	9.10	0.00	0.00	0.00
Pugmire, Charles	T54566	100.0	102.7	102.7	40.00	32.94	32.94	33.83	0.89	8.15	7.25	0.00	7.25
Rockford, June	A65657	100.0	114.8	114.8	40.00	37.50	37.50	43.05	5.55	8.75	48.56	0.00	48.56
Stillwell, Yolanda	K92954	100.0	98.1	98.1	40.00	36.52	36.52	35.81	0.00	6.98	0.00	0.00	0.00
Stuckey, Alice	C29112	100.0	93.0	93.0	40.00	33.51	33.51	31.15	0.00	7.50	0.00	0.00	0.00
Washington, Joe	C90041	100.0	95.7	95.7	37.90	29.14	29.14	27.90	0.00	7.80	0.00	0.00	0.00
Williams, Tom	T21223	100.0	97.3	97.3	40.00	35.45	35.45	34.50	0.00	9.15	0.00	0.00	0.00
Woods, Mary	A13542	100.0	104.3	104.3	40.00	33.80	33.80	35.26	1.46	6.72	9.81	0.00	9.81

Incentive Calculation Summary Report in Alphabetical Order

The Incentive Calculation Associate Detail Report has a page for each associate showing how their incentive pay was calculated.

SSI Southeastern Distribution Center

Incentive Date: Saturday, September 23, 2000

Incentive Calculation Report

Associate Detail

Associate: A65657 - Rockford, June **Home Work Center: Order Filling First Shift**

MEASURED HOURS:			
Receive Common Carrier - Measured Hours	6.12		
Put Away - Measured Hours	1.86		
Staging - Measured Hours	18.67		
Loading - Measured Hours	10.85		
Total	37.50		
UNMEASURED HOURS:			
Break - Unmeasured Hours	2.50		
EARNED HOURS:			
Receive Common Carrier - Earned Hours	6.95		
Put Away - Earned Hours	2.19		
Staging - Earned Hours	20.63		
Loading - Earned Hours	13.28		
Total	43.05		
HOURS CALCULATIONS:			
Total Hours Worked:	40.00		
Overtime Hours:	0.00		
Incentive Pay Rate:	8.75		
Measured Hours (Regular+Protected):	37.50	93.75%	Percent Measured Hours
Earned Hours (Regular+Protected):	43.05	114.80%	Normal Performance
Earned Hours Goal:	-37.50	100.00%	Performance Goal
Incentive Hours:	5.55		

INCENTIVE PAYOUT CALCULATIONS:

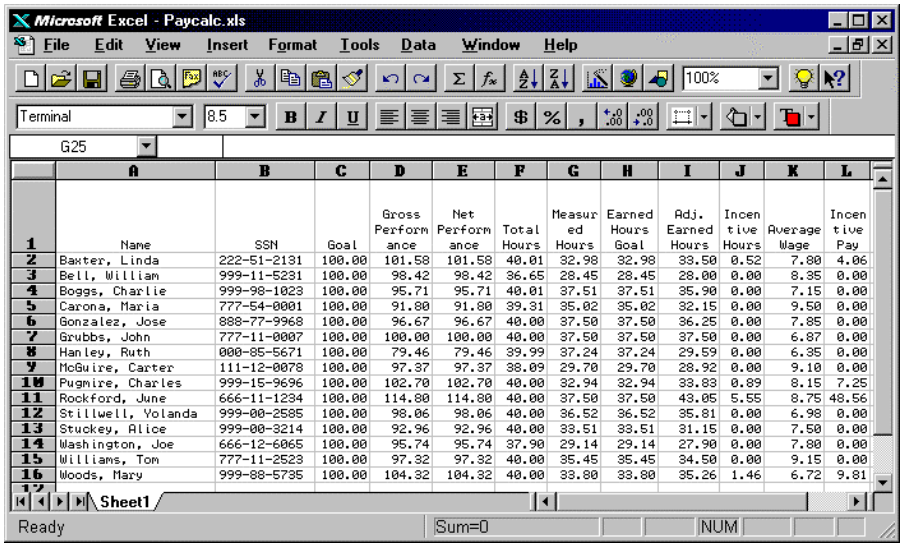
For Each 10% Increment of Performance Above the Goal of 100%	Incentive Hours		Incentive Pay Rate		Payout Rate		Incentive Pay
From 100% to 110%	3.75	x	$8.75	x	100%	=	$32.81
From 110% to 120%	1.80	x	$8.75	x	100%	=	$15.75
114.80%	5.55						$48.56

Incentive Increases Pay Rate:	1.30	per Measured Hour
	1.21	per Total Hour
**** Total Incentive to be paid ****	48.56	

ProRep Page: 12 Printed: 9/26/00 12:51

Incentive Calculation Associate Detail Report

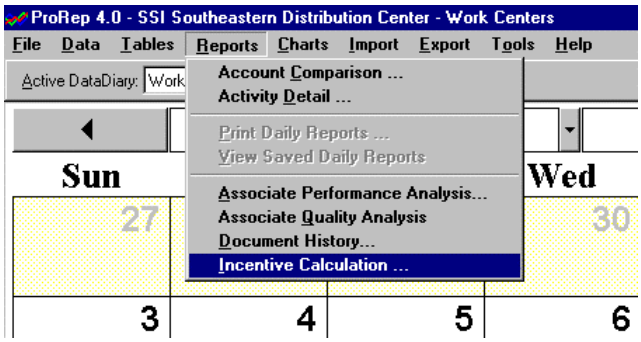
The Spreadsheet File contains a line for each associate with incentive pay calculation results. The spreadsheet file can be opened in spreadsheet applications, like Microsoft Excel, to analyze the results or to make additional incentive calculations.



	A	B	C	D	E	F	G	H	I	J	K	L
1	Name	SSN	Goal	Gross Performance	Net Performance	Total Hours	Measured Hours	Earned Hours Goal	Adj. Earned Hours	Incentive Hours	Average Wage	Incentive Pay
2	Baxter, Linda	222-51-2131	100.00	101.58	101.58	40.01	32.98	32.98	33.50	0.52	7.80	4.06
3	Bell, William	999-11-5231	100.00	98.42	98.42	36.65	28.45	28.45	28.00	0.00	8.35	0.00
4	Boggs, Charlie	999-98-1023	100.00	95.71	95.71	40.01	37.51	37.51	35.90	0.00	7.15	0.00
5	Carona, Maria	777-54-0001	100.00	91.80	91.80	39.31	35.02	35.02	32.15	0.00	9.50	0.00
6	Gonzalez, Jose	888-77-9968	100.00	96.67	96.67	40.00	37.50	37.50	36.25	0.00	7.85	0.00
7	Grubbs, John	777-11-0007	100.00	100.00	100.00	40.00	37.50	37.50	37.50	0.00	6.87	0.00
8	Hanley, Ruth	000-85-5671	100.00	79.46	79.46	39.99	37.24	37.24	29.59	0.00	6.35	0.00
9	McGuire, Carter	111-12-0078	100.00	97.37	97.37	38.09	29.70	29.70	28.92	0.00	9.10	0.00
10	Pugmire, Charles	999-15-9696	100.00	102.70	102.70	40.00	32.94	32.94	33.83	0.89	8.15	7.25
11	Rockford, June	666-11-1234	100.00	114.80	114.80	40.00	37.50	37.50	43.05	5.55	8.75	48.56
12	Stillwell, Yolanda	999-00-2585	100.00	98.06	98.06	40.00	36.52	36.52	35.81	0.00	6.98	0.00
13	Stuckey, Alice	999-00-3214	100.00	92.96	92.96	40.00	33.51	33.51	31.15	0.00	7.50	0.00
14	Washington, Joe	666-12-6065	100.00	95.74	95.74	37.90	29.14	29.14	27.90	0.00	7.80	0.00
15	Williams, Tom	777-11-2523	100.00	97.32	97.32	40.00	35.45	35.45	34.50	0.00	9.15	0.00
16	Woods, Mary	999-88-5735	100.00	104.32	104.32	40.00	33.80	33.80	35.26	1.46	6.72	9.81

Incentive Spreadsheet File Opened in Microsoft Excel

To print the incentive calculation report, from the menu bar select Reports, Incentive Calculation.



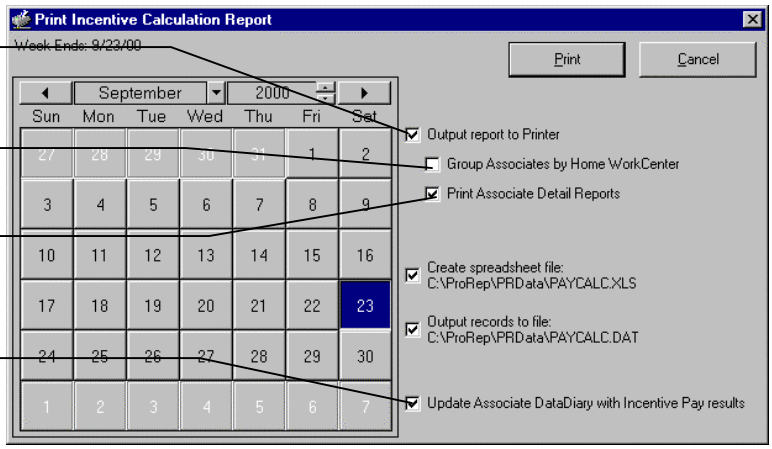
A dialog box is displayed.

Prints the Incentive Calculation Summary Reports.

Prints separate reports for each work center.

Prints a one page detailed report for each associate.

Writes the incentive calculation results into the associate DataDiary.



Click any day in the week for which the incentive pay should be calculated and the reports printed. Check the boxes for the reports and files that are to be generated.

The incentives can be calculated for any past week. Incentives can also be calculated without writing the results into the associate DataDiary. With these capabilities, the results of using different incentive parameters can be tested.

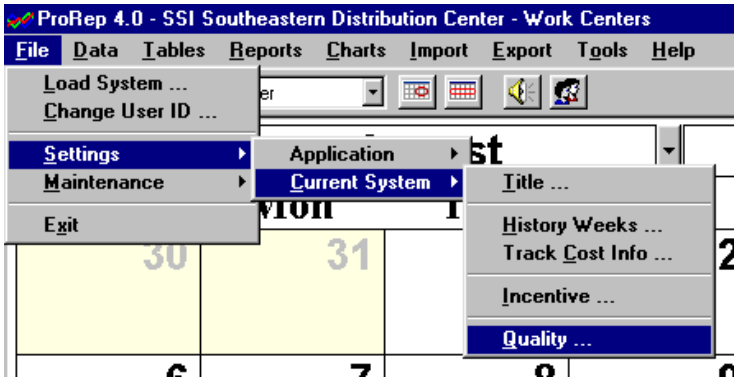
Appendix B: Setting up the Quality Measurement Feature

Use of ProRep's quality measurement and reporting feature is optional. Even after the rest of the ProRep system has been running for some time, quality can be activated.

After the quality measurement feature is enabled, the mistakes that can occur are defined, and settings related to quality are made for the types of work that will be audited. Also, when daily files are created, a quality sheet file is created in addition the production sheet file.

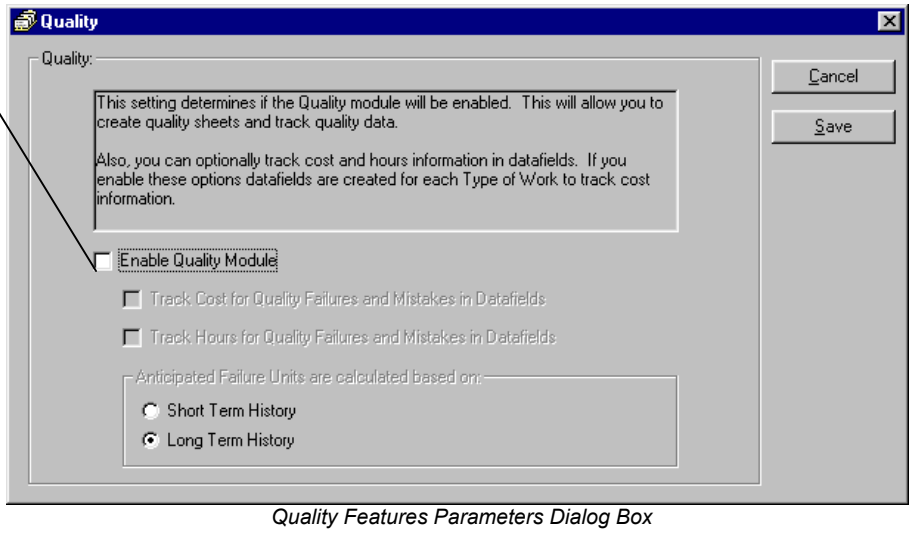
Activating the Quality Feature

Even though quality is a standard feature of ProRep, it must be turned on before quality can be measured. From the menu bar select File, Settings, Current System, Quality.



A dialog box containing the quality settings is displayed.

Click Enable Quality Module to turn on Quality Tracking.


Quality
Quality:
This setting determines if the Quality module will be enabled. This will allow you to create quality sheets and track quality data.
Also, you can optionally track cost and hours information in datafields. If you enable these options datafields are created for each Type of Work to track cost information.
Enable Quality Module
Track Cost for Quality Failures and Mistakes in Datafields
Track Hours for Quality Failures and Mistakes in Datafields
Anticipated Failure Units are calculated based on:
Short Term History
Long Term History
Cancel
Save

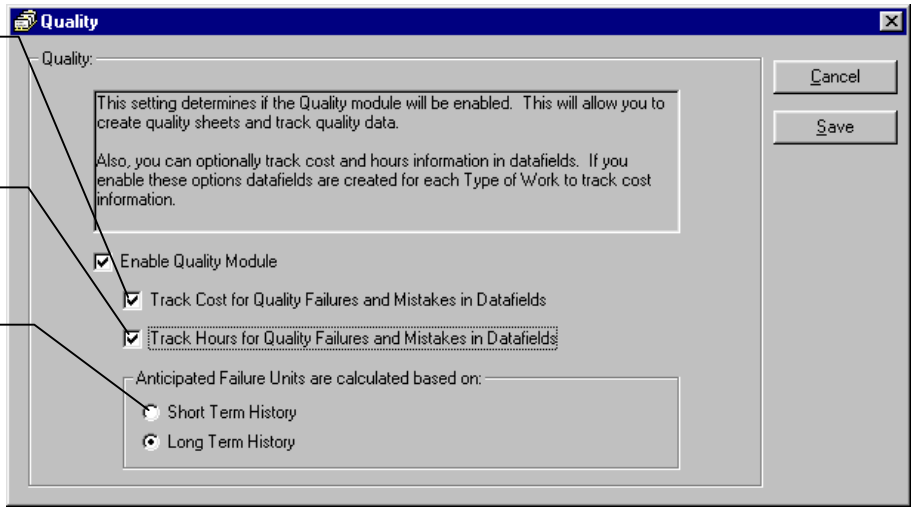
Quality Features Parameters Dialog Box

Check the Enable Quality Module check box to turn quality on. The quality feature can be turned on for use at any time after a ProRep system is active.

To track the monetary cost of poor quality check this box.

To track the labor hours cost of poor quality check this box.

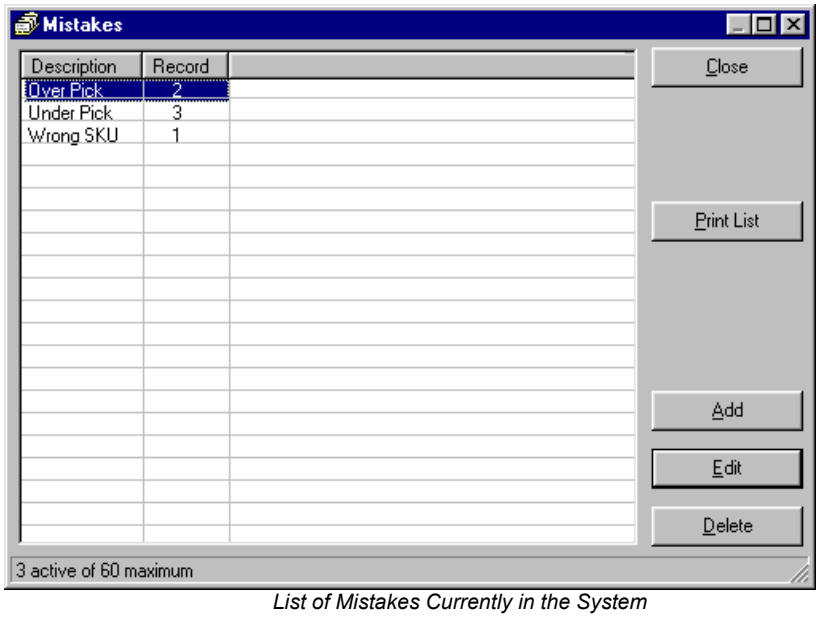
ProRep can compare current quality errors to either short term or long term averages when calculating the quality index.


Quality
Quality:
This setting determines if the Quality module will be enabled. This will allow you to create quality sheets and track quality data.
Also, you can optionally track cost and hours information in datafields. If you enable these options datafields are created for each Type of Work to track cost information.
Enable Quality Module
Track Cost for Quality Failures and Mistakes in Datafields
Track Hours for Quality Failures and Mistakes in Datafields
Anticipated Failure Units are calculated based on:
Short Term History
Long Term History
Cancel
Save

Quality Features Parameters Dialog Box

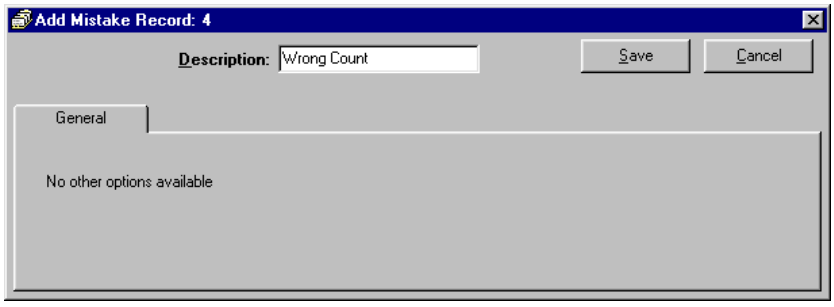
Mistake Table Settings Related to Quality

Mistakes are the types of error found as a result of quality audits. Below is the mistakes table.



List of Mistakes Currently in the System

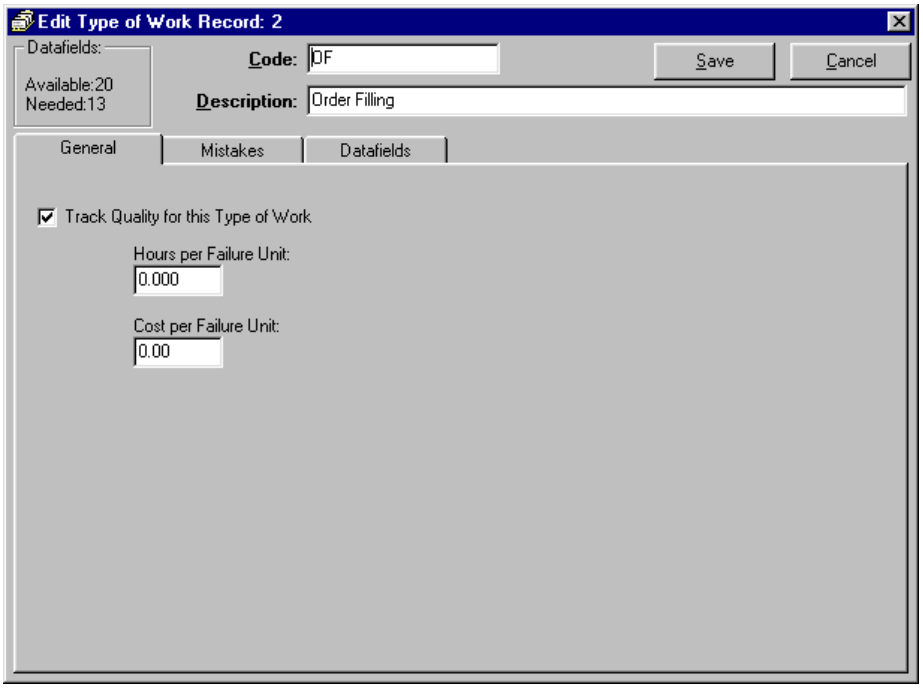
The entries in the mistakes table are available for selection on the type of work's mistakes tab.



The only setting for a mistake is its description.

Type of Work Table Settings Related to Quality

The results of quality audits are entered and tracked by type of work. Below is the Type of Work General tab.

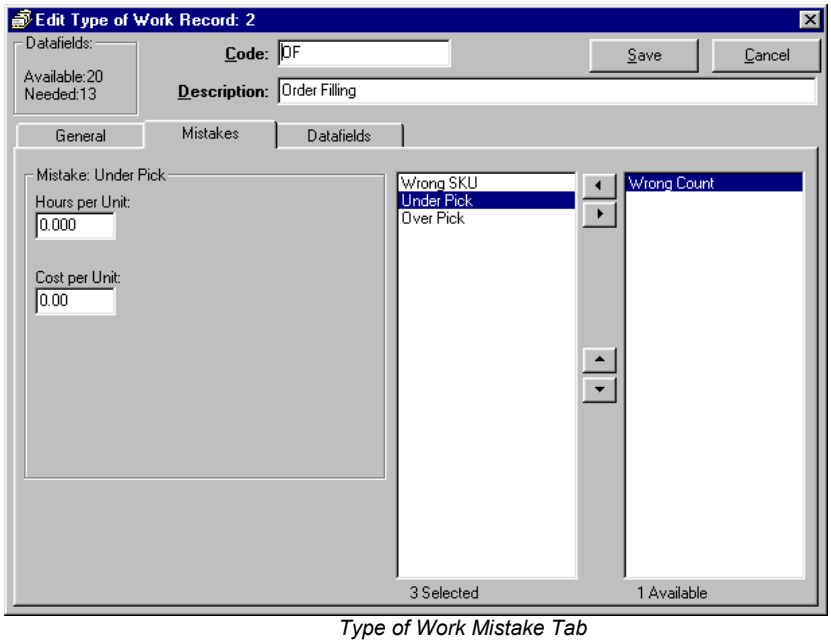


Enabling the Measurement of Quality for a Type of Work - To track quality for a type of work, on the General tab check the box next to Track Quality for this Type of Work.

The track quality setting will allow units audited and units failed to be entered on daily quality sheets. Datafields for the type of work will be set up in all three DataDiaries for audited units, audited occurrences, failed units and failed occurrences. If the tracking of quality monetary cost and hours features are enabled, datafields will also be set up for failure cost and failure hours.

Specifying the Reasons Why an Item Fails a Quality Audit - To specify why an item fails an audit, on the Mistakes tab, select the mistakes that can occur when performing the type of work.

Below is the Type of Work Mistakes tab:



Type of Work Mistake Tab

Datafields for the type of work's mistakes will be set up in all three DataDiaries for mistake units and mistake occurrences.

Tracking the Cost of Quality Failures - The cost of quality can be measured in money or time. A monetary or time cost can be specified for both a type of work failure and its mistakes.

To specify the amount of money or hours that a failure costs, on the General tab enter the monetary amount or hours. To specify the amount of money or hours that each type of mistake costs, on the Mistakes tab highlight each mistake and enter the monetary amount or hours.

Usually the quality costs are associate with either the failure or the various types of mistakes. Seldom would there be costs associated with both a failure *and* the types of mistakes.

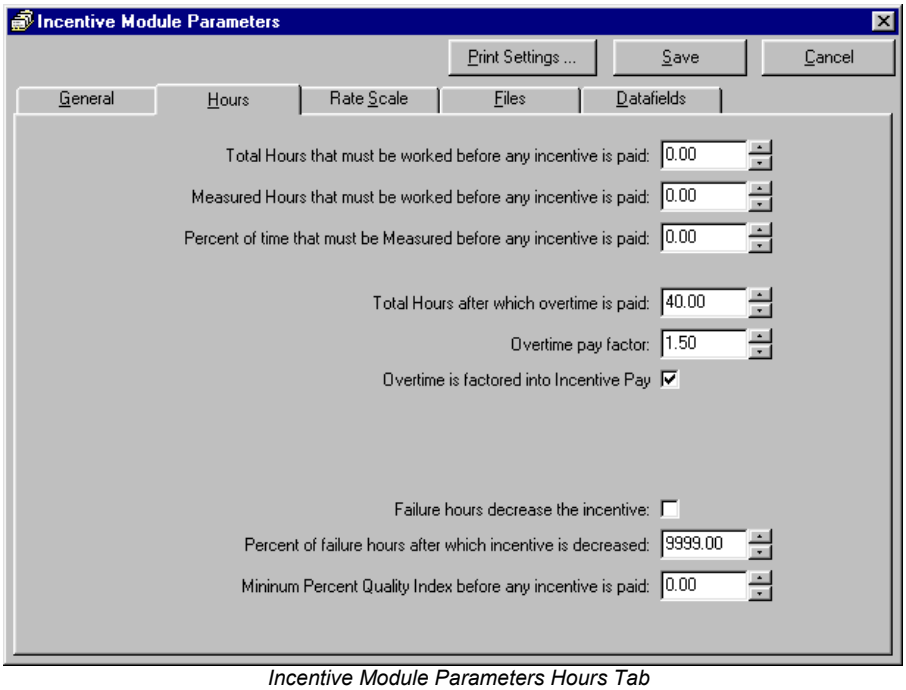
For example, if an item is scrapped as the result of a quality failure without regard to the reason for the mistake, the cost should be associated with the failure. If an item that fails an audit can be made usable through rework, and the amount of rework depends on the type of mistake, different costs should be specified for each type of mistake.

Reducing Incentive Pay as a Consequence of Quality Failures - The entries into the type of work's Hours per Failure Unit and Hours per Mistake Unit fields control how much time is subtracted from the incentive pay hours.

Mistakes can reduce the amount of incentive pay. For more information on reducing the amount of incentive paid for mistakes made please refer to *Appendix A: Setting Up the Incentive Module*.

Incentive Module Parameters Related to Quality

Three parameters on the Incentive Module Parameters Hours tab determine if incentive pay is decreased or prevented as a result of ProRep's quality feature's failure hours.



Incentive Module Parameters Hours Tab

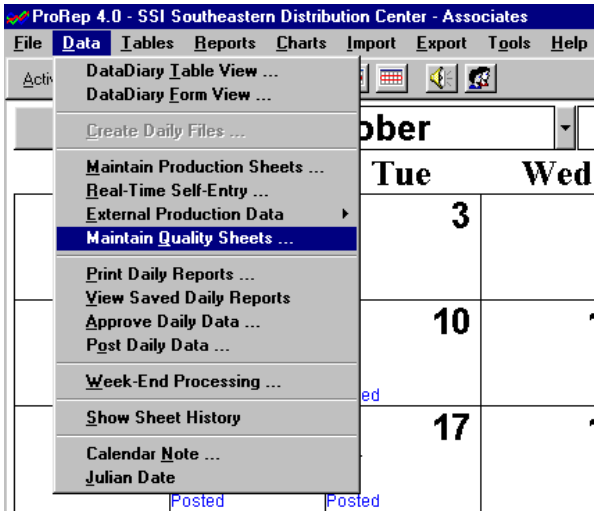
Failure hours decrease the incentive - Checking this box will result in the associate's quality failure hours being subtracted from their earned hours. The result is that the associate's percent performance for incentive purposes is reduced by the amount of quality failure hours. ProRep's quality features must be enabled in order to reduce incentive based on quality results. The calculation of failure hours are controlled by settings associated with the types of work.

Percent of failure hours after which incentive is decreased - The percent of mistake hours is calculated as a percent of the earned hours. If the percent of mistake hours is greater than the percent set for this parameter, the incentive hours (earned hours) are reduced by the mistake hours that are in excess of this percent.

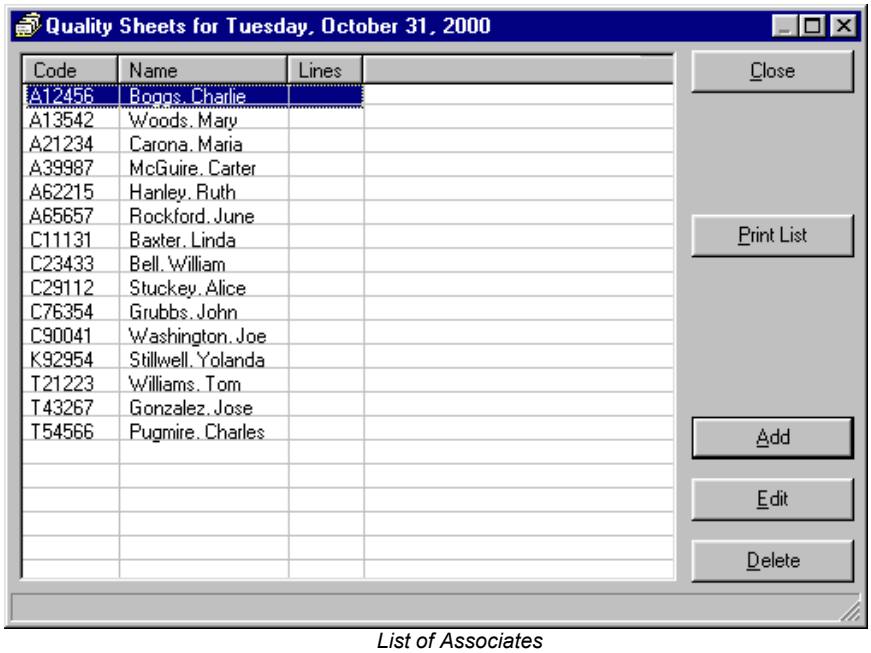
Minimum Percent Quality Index before any incentive is paid - If the associate's quality index is less then the percent specified for this parameter, no incentive is paid.

Recording the Results of Audits

Quality sheets are similar to production sheets. When daily files are created the quality sheets are created. To add or edit production sheets click on the desired day, click Data, Maintain Quality Sheets.



A list of associates is displayed.



List of Associates

Quality sheets are usually entered into ProRep from manually maintained logs kept by an auditor. Select the associate who performed the audits and click Add.

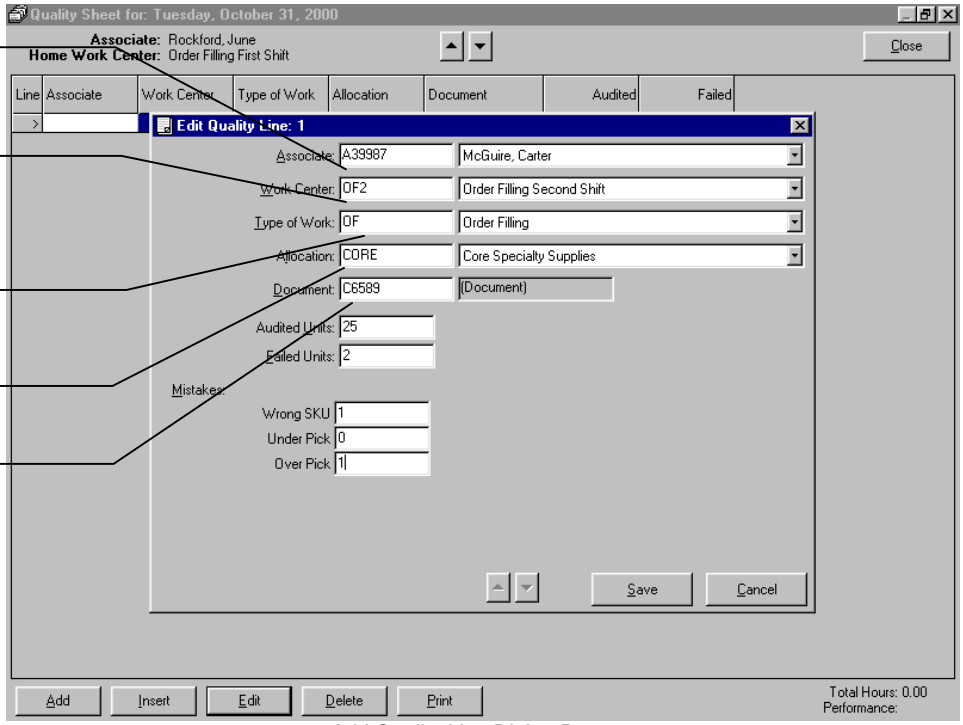
Enter the Associate that was audited.

Enter the work center where the work was performed.

Enter the Type of Work

Enter the Allocation.

Optionally a Document Number can be entered.



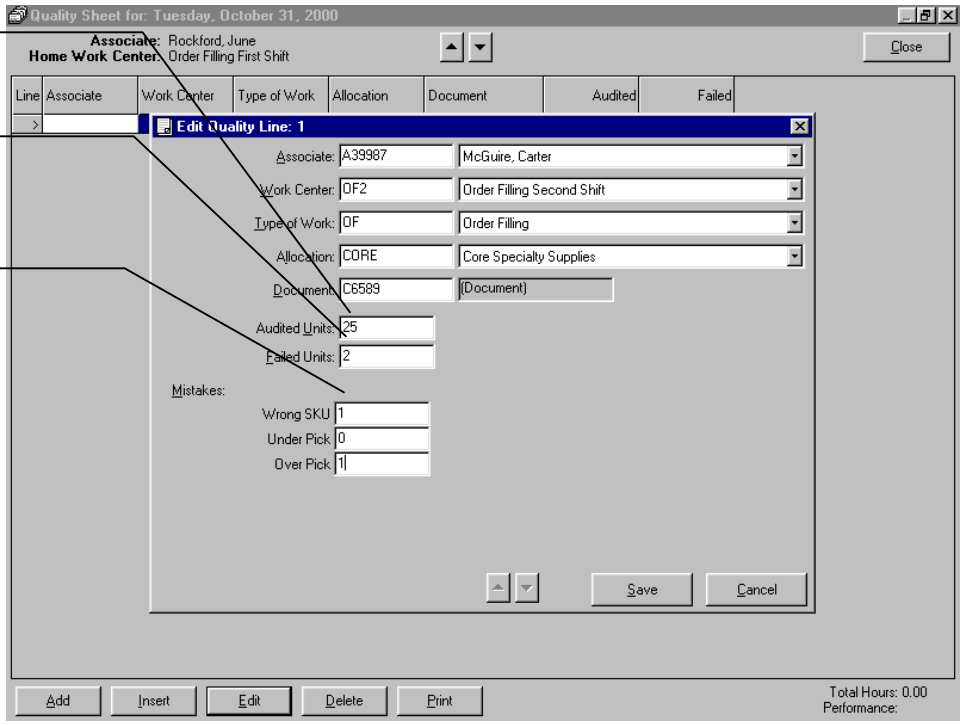
Add Quality Line Dialog Box

The quality sheets are entered in a similar manner to production sheets.

Enter the number of Audited Units

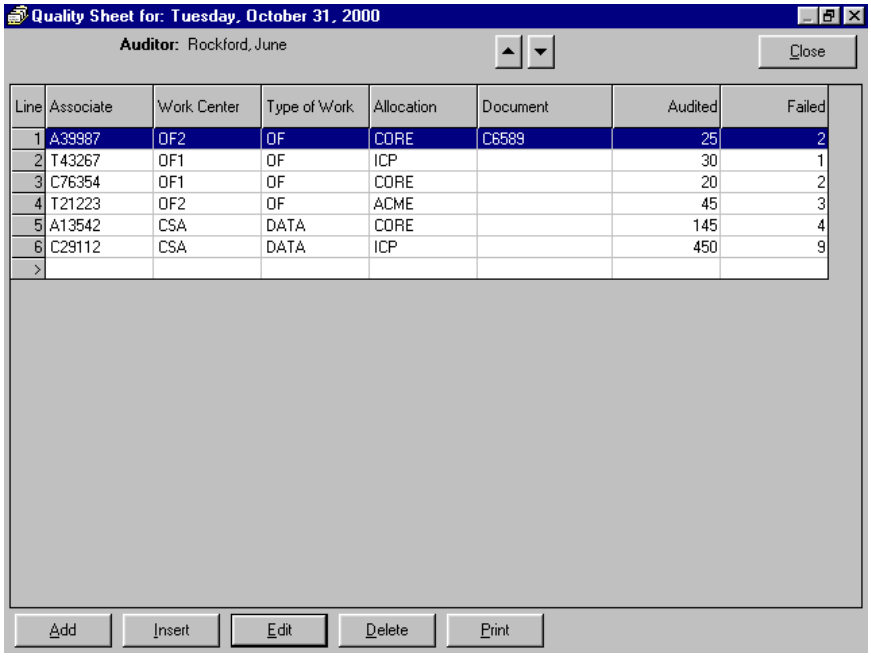
Enter the number of units that failed the audit.

Enter the number and type of mistakes made.



Add Quality Line Dialog Box

When entry of the audit is complete, click the Save button. After all audits performed by the auditor have been entered click the Close button.



Click the Save button to return to the list of auditors.

This Page Intentionally Left Blank

Appendix C: User IDs and Passwords

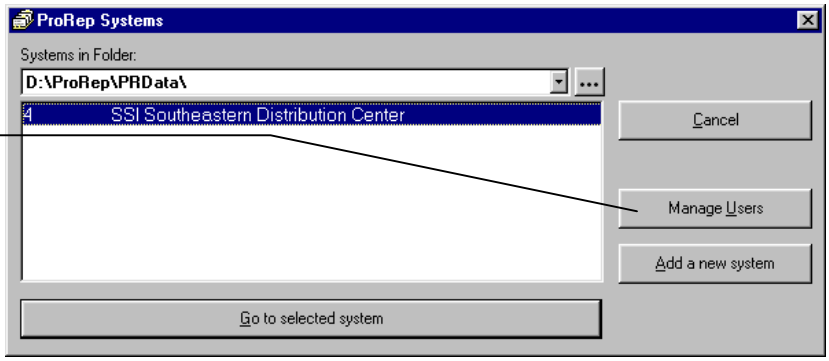
When the software is run and a ProRep system is loaded, the user is prompted for a user ID and password. All user's should have their own user ID and password.

The user IDs and passwords are maintained at the folder level. That means that a user has the same rights to all ProRep systems in the same folder. If there are other ProRep systems in another folder, that folder has its own unique set of users.

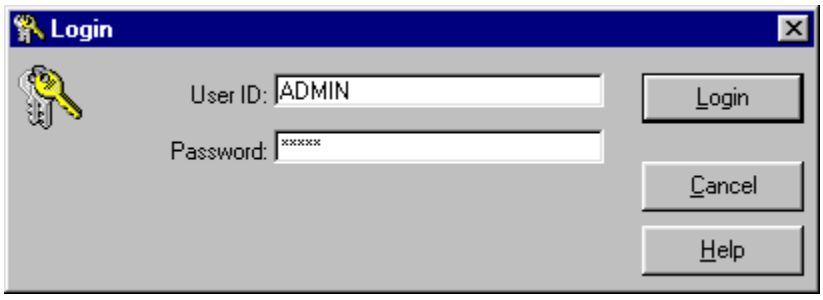
Adding a New User

New users are added from the initial log in screen. An Administrator level user is the only type of user allowed to add or edit users.

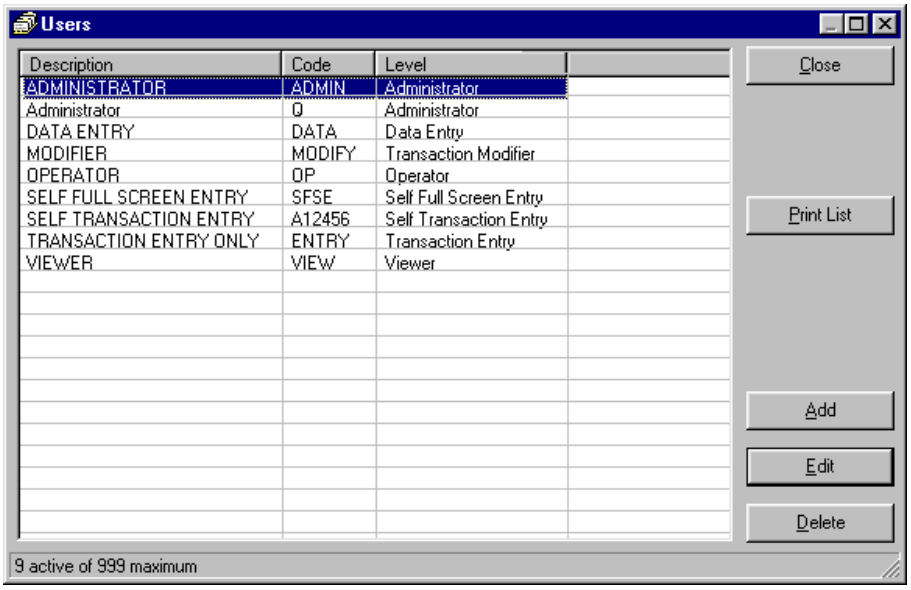
Click the Manage Users button to add or edit a user.



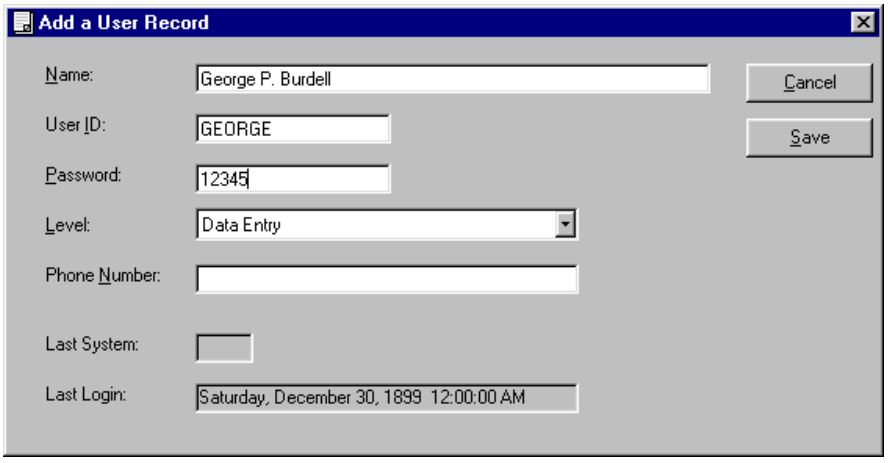
The first time ProRep is run; a default user is created. The default user ID is ADMIN and the password is ADMIN



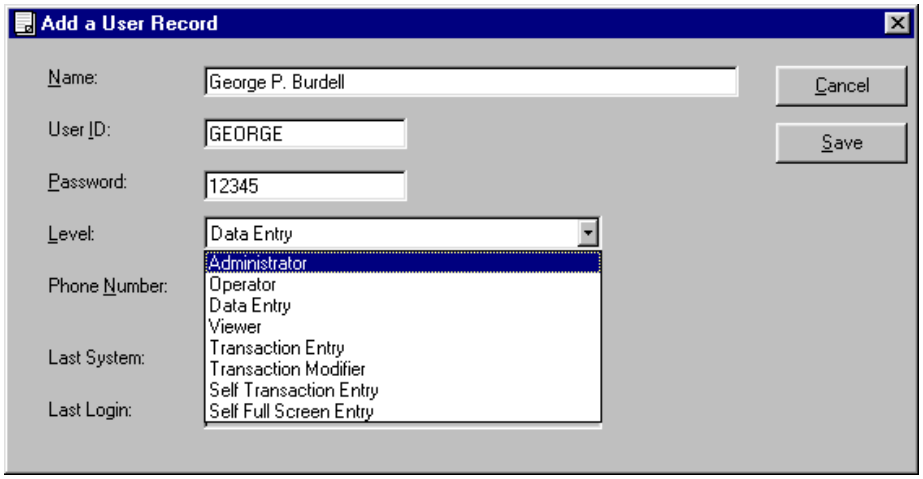
After entering an administrator level user ID and password, a list of currently defined users is displayed.



To add a new user, click Add. To edit a current user, click Edit.



The user ID and password can be any character, up to 10 characters in length. They are not case sensitive.

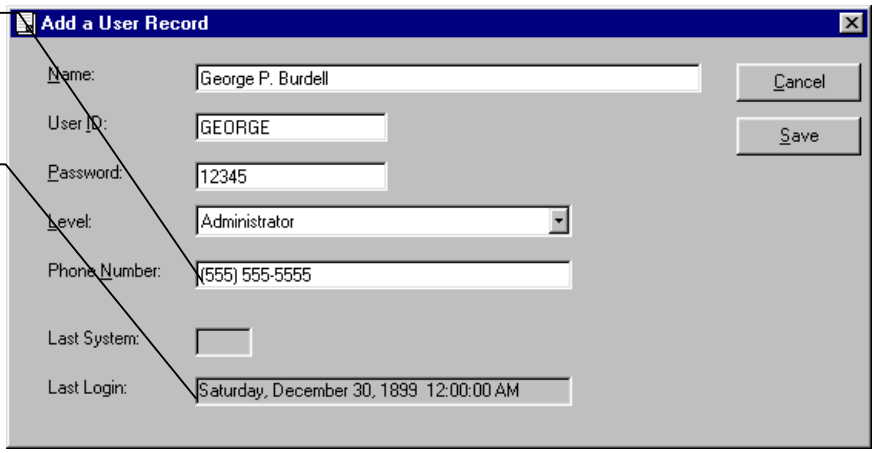


The level of a user determines the user's access the features of ProRep.

Administrator	Administrator level users have access to all ProRep features and options.
Operator	Operator level users have access to all ProRep features except: adding and editing users, reports, graphs, editing activities, and elements.
Data Entry	Data Entry level users have the same restrictions as the operator. In addition, Data Entry is restricted from changing any of the tables.
Viewer	Viewer level users can only view data.
Transaction Entry	Transaction Entry can start ProRep for self transaction entry of production data into ProRep.
Transaction Modifier	Transaction Modifier can start ProRep for self transaction entry and edit production sheets.
Self Transaction Entry	Self Transaction Entry allows individual associates to enter their own production sheets without repeatedly entering their associate number. Associates can not enter data for other associates. This used level requires that the associate number is entered as the user ID.
Self Full Screen Entry	Self Full Screen Entry allows individual associates to enter Production data directly onto their production sheet. Associates can not enter data for other associates. This used level requires that the associate number is entered as the user ID.

Phone Number is an optional field.

This area displays information about the user's last log in to a ProRep system.



After a user's record is saved the user can log in immediately.

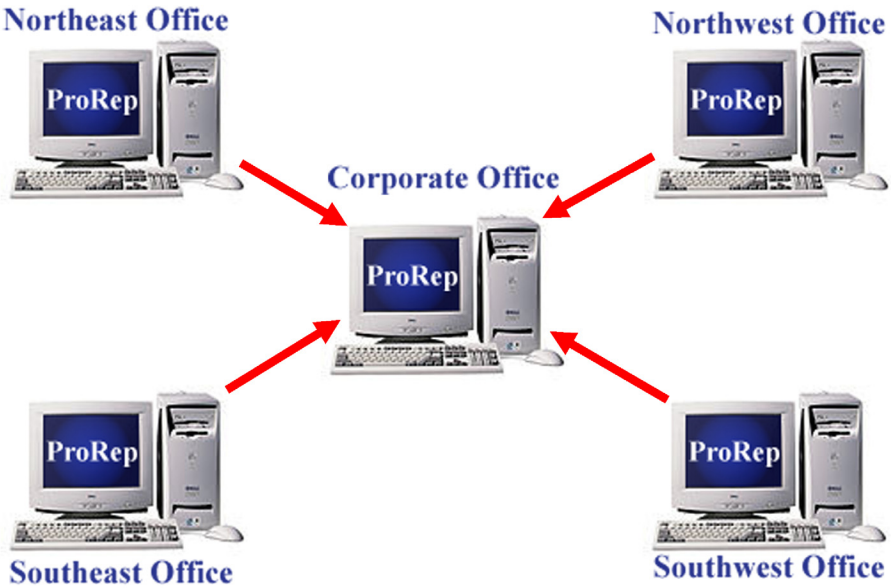
Appendix D: Corporate Wide Reporting Systems

The following chapter is an overview of a corporate wide reporting system. Specific procedures performed in the software are document elsewhere in the manual. The material below simply illustrates the functionality using the features built into ProRep.

What a Corporate Wide Reporting System Does

To use the corporate wide reporting feature of ProRep the following requirements must be met:

- ProRep must be running at each location and at corporate.
- A means to transfer computer files from each location to corporate must be in place (e-mail, LAN, WAN, or Intranet is recommended.)



Corporate Wide Reporting Systems always have a central or corporate office that collects the data.

Corporate Wide Reports and Graphs

Corporate wide reports and graphs are produced at the central office. These can then be sent to the branch offices for comparison. Chapter 13 of the manual describes in detail how to setup and use reports.

Spalding Global Logistic Services

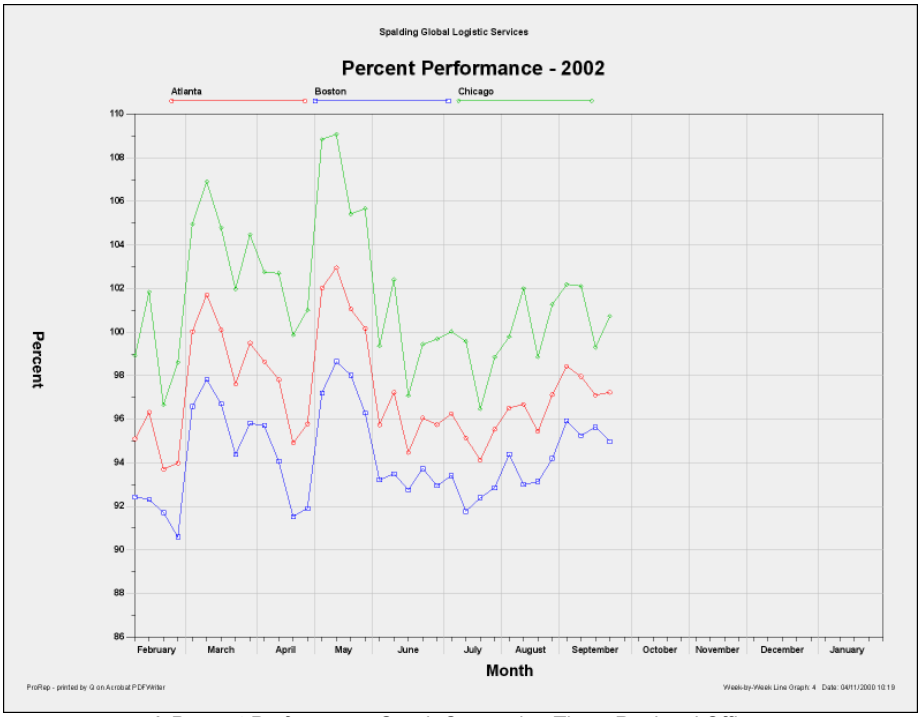
Total Order Filling Summary

Week Ending: Saturday, July 06, 2002

Account	Order Filling														
	Orders			Cartons			Cartons Per Order			Total Hours			Cartons Per Total Hour		
	2002	2001	%	2002	2001	%	2002	2001	%	2002	2001	%	2002	2001	%
Atlanta	241	152	59	29,856	23,601	27	123.9	155.3	-20	1,459.25	1,095.25	33	20.5	21.5	-5
Los Angeles	651	369	76	27,523	28,541	-4	42.3	77.3	-45	985.33	1,865.66	-47	27.9	15.3	83
Boston	841	241	249	25,413	19,602	30	30.2	81.3	-63	1,456.14	959.33	52	17.5	20.4	-15
Denver	244	147	66	24,531	15,426	59	100.5	104.9	-4	1,641.24	985.45	67	14.9	15.7	-5
Chicago	541	254	113	22,145	26,541	-17	40.9	104.5	-61	1,456.35	1,748.75	-17	15.2	15.2	0
All Accounts	4,107	2,263	81	130,456	114,711	14	31.8	50.7	-37	8,698.31	8,402.44	4	15.0	13.7	10

A One-Line Report Showing Order Filling for Five Regional Offices

The same information is used to create graphs. Chapter 14 of the manual describes in detail how to setup and use graphs.

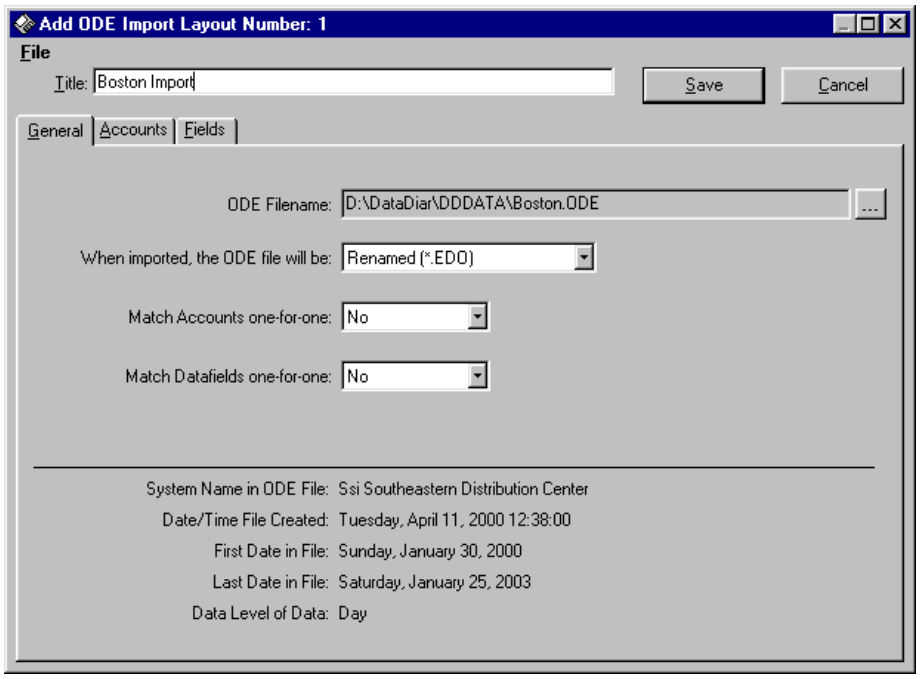


A Percent Performance Graph Comparing Three Regional Offices

Typically a corporate wide system will import data once a week, although, data can be imported at any time as long as the remote locations have exported the data. Chapter 15 of the manual describes the import and exporting of data in detail.

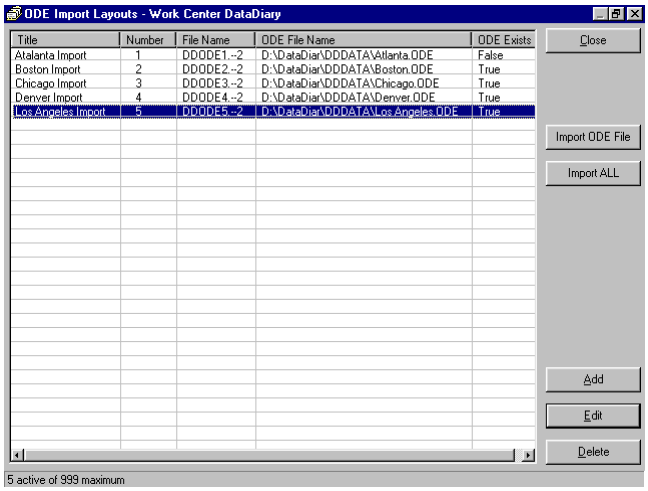
How the Corporate Wide Reporting System Works

A corporate wide reporting system collects data from multiple remote systems via Operational Data Exchange (ODE) files. An export file is created at a remote location and then either e-mailed, saved to a LAN/WAN, or placed on a corporate wide intranet. The ODE file is then imported by a central ProRep system. The importing ProRep system controls all aspects of the data except the length of time in the file.


Add ODE Import Layout Number: 1
File
Title: Boston Import
Save
Cancel
General
Accounts
Fields
ODE Filename: D:\DataDiar\DDDATA\Boston.ODE
When imported, the ODE file will be: Renamed (*.EDO)
Match Accounts one-for-one: No
Match Datafields one-for-one: No
System Name in ODE File: Ssi Southeastern Distribution Center
Date/Time File Created: Tuesday, April 11, 2000 12:38:00
First Date in File: Sunday, January 30, 2000
Last Date in File: Saturday, January 25, 2003
Data Level of Data: Day

Import File Layout Window

Once an import layout is defined (as described in Chapter 15) importing is a one step process. The ODE file must exist before an import layout can be defined.


ODE Import Layouts - Work Center DataDiary
Title | Number | File Name | ODE File Name | ODE Exists
Atalanta Import | 1 | DDODE1.--2 | D:\DataDiar\DDDATA\Atlanta.ODE | False
Boston Import | 2 | DDODE2.--2 | D:\DataDiar\DDDATA\Boston.ODE | True
Chicago Import | 3 | DDODE3.--2 | D:\DataDiar\DDDATA\Chicago.ODE | True
Denver Import | 4 | DDODE4.--2 | D:\DataDiar\DDDATA\Denver.ODE | True
Los Angeles Import | 5 | DDODE5.--2 | D:\DataDiar\DDDATA\Los Angeles.ODE | True
Close
Import ODE File
Import ALL
Add
Edit
Delete
5 active of 999 maximum

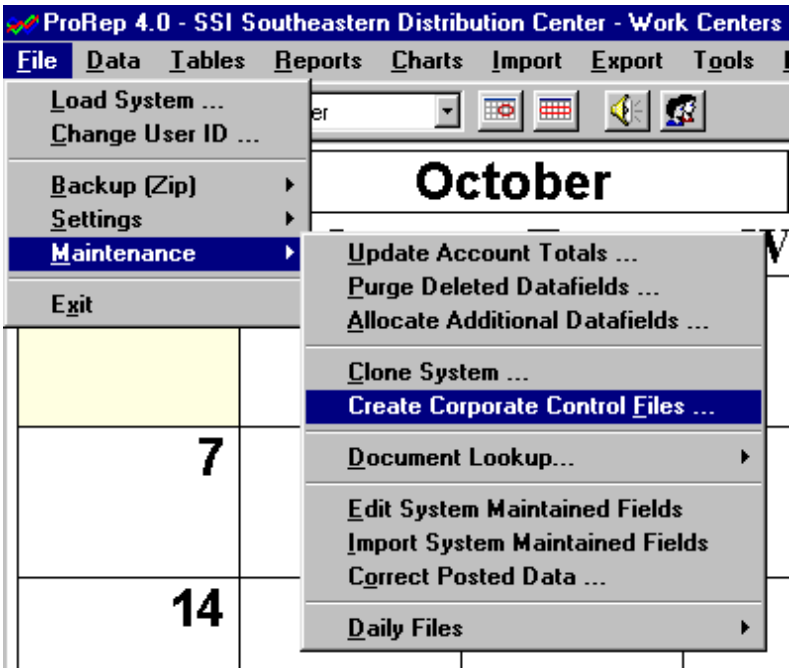
Listing of ODE Import Layouts

By simply clicking Import or Import All the corporate system will import the data from remote locations.

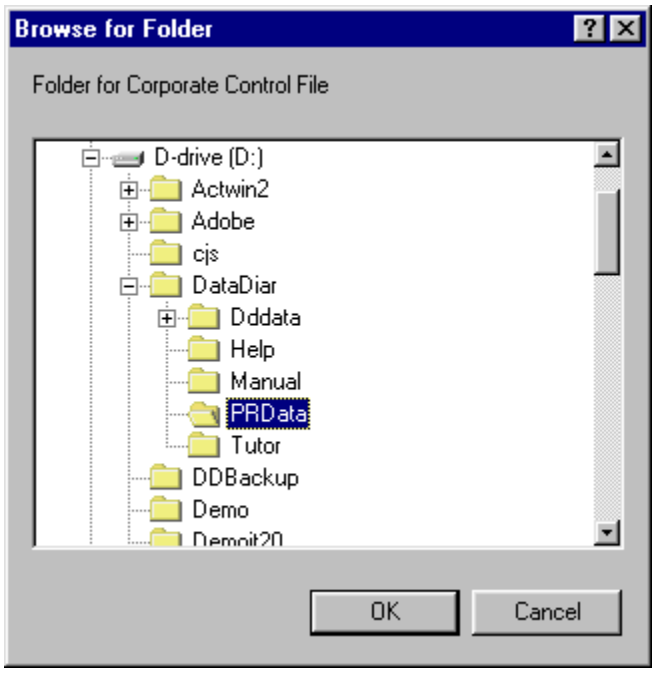
Using a Corporate Control File

The corporate controls are available to restrict the remote access of the ProRep system. Since importation depends on consistent files from the remote systems, a corporate control file can be activated to restrict major changes made in remote facilities.

Select File, Maintenance, Create Corporate Control Files.



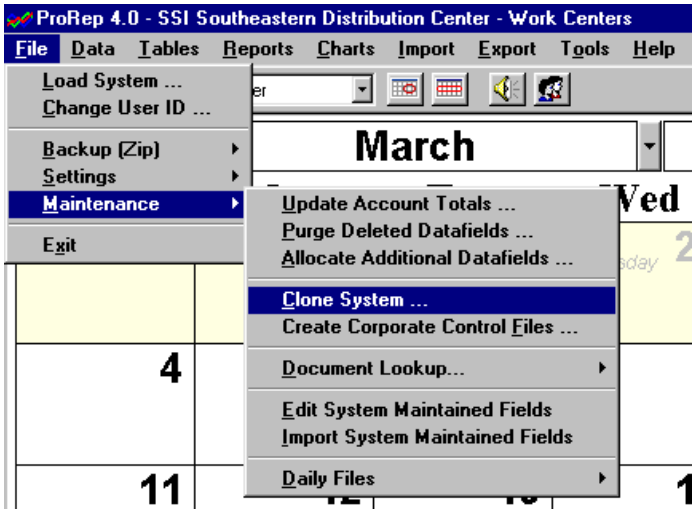
Select the folder for the corporate control file. The corporate control file should be placed in the folder containing the system files; this is usually the PRDATA folder in the ProRep folder.



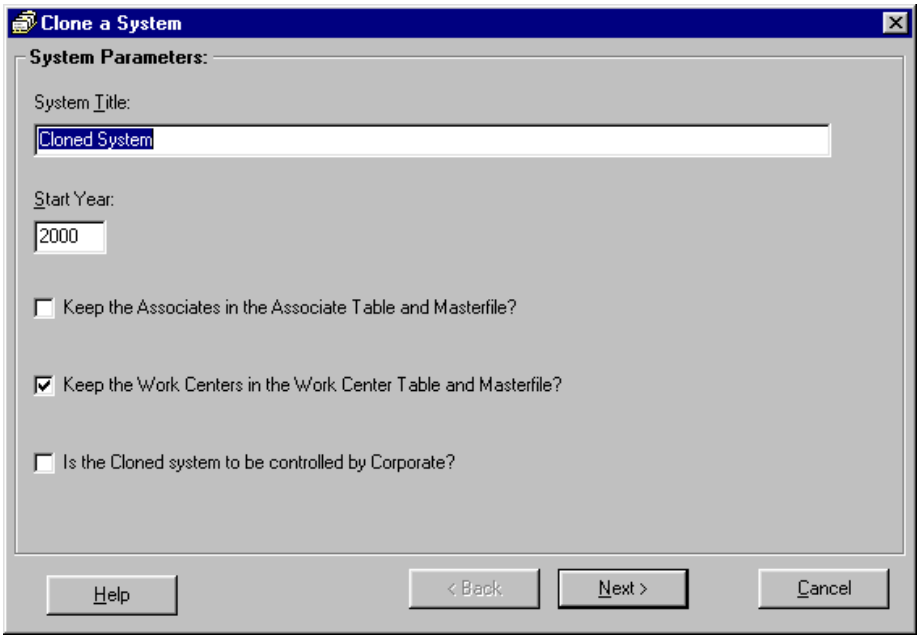
A corporate control file can be created when cloning a system

Cloning a ProRep System

Sometimes it may be necessary to clone a ProRep System. ProRep Systems are usually cloned for new remote location. Sometimes systems should be setup fresh and not cloned please contact Spalding Software if unsure about the best solution for a particular situation.



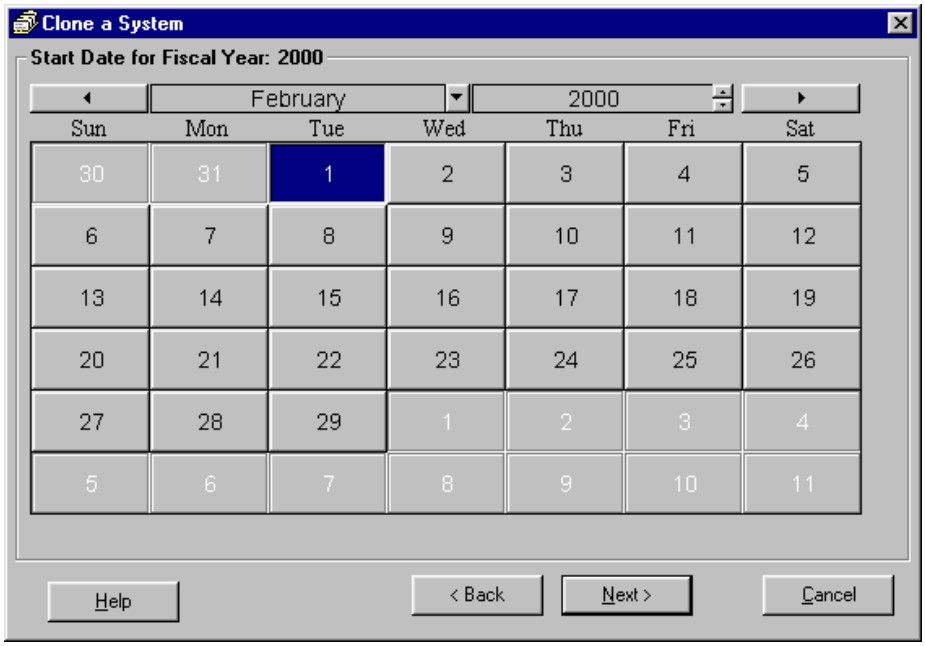
The clone a system dialog box will open.



Enter the following information:

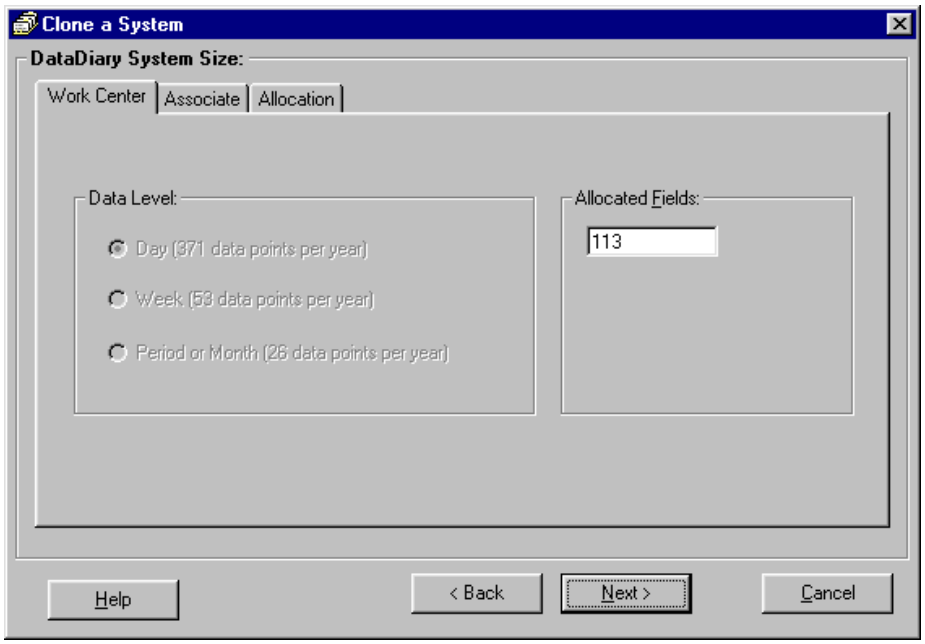
- **System Title**-The text to appear at the top of all reports. This is usually the company name.
- **Start Year**-The first fiscal year to include in the ProRep Database. This is usually the current year.
- **Keep the Associates in the Associate Table and Master File**- If a system is being cloned for testing purposes a copy of the associate table and master file can be made. The table will contain no data.
- **Keep the Work Centers in the Work Center Table and Master File-** If the facility the cloned system is has the same work centers
- **Is the Cloned System to be controlled by Corporate?** If a corporate wide reporting system is in place with corporate controls checking this box will add the corporate control files describe earlier in this chapter.

Click Next to continue.

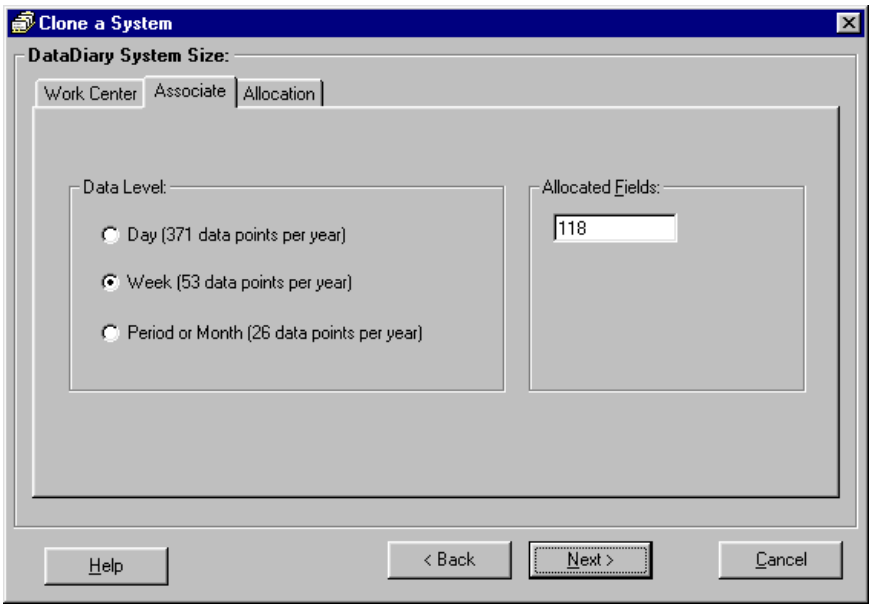


Select the first date in the fiscal year and click Next to continue.

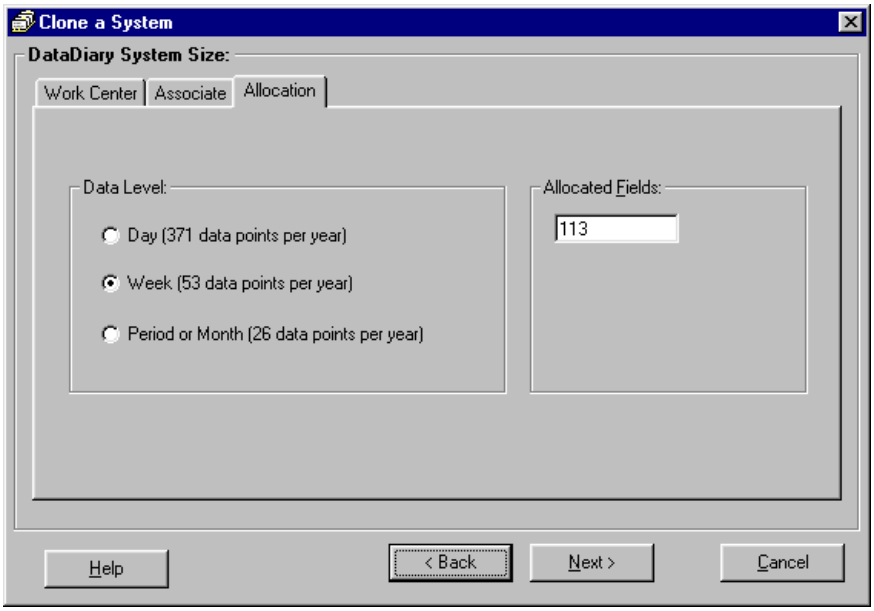
The following page of the wizard has three tabs.



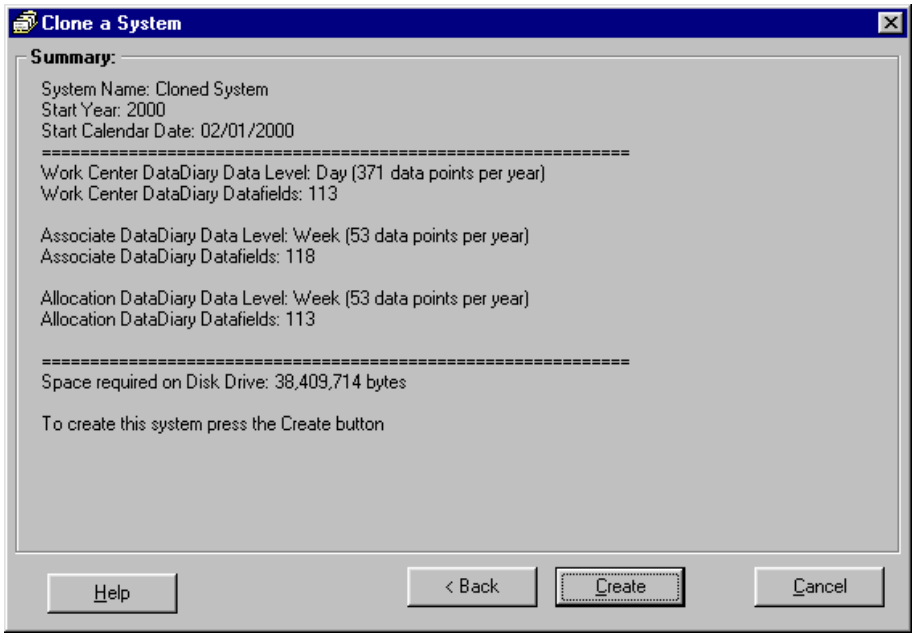
The work center DataDiary's data level can not be selected. It is always daily. The number of allocated fields is from the system being cloned. Click the associate tab to continue.



The associate DataDiary's data level can be selected. The most common data level used is weekly; if unsure of the of the desired level use the default selection of weekly. Select the desired data level and click the allocation tab.



The allocation DataDiary's data level can be selected. The most common data level used is weekly; if unsure of the of the desired level use the default selection of weekly. Select the desired data level and click next to continue.


Clone a System
Summary:
System Name: Cloned System
Start Year: 2000
Start Calendar Date: 02/01/2000
==========
Work Center DataDiary Data Level: Day (371 data points per year)
Work Center DataDiary Datafields: 113
Associate DataDiary Data Level: Week (53 data points per year)
Associate DataDiary Datafields: 118
Allocation DataDiary Data Level: Week (53 data points per year)
Allocation DataDiary Datafields: 113
==========
Space required on Disk Drive: 38,409,714 bytes
To create this system press the Create button
Help
< Back
Create
Cancel

All of the selections that have been made are displayed in this dialog box. Click Back to change a setting. Click Create to accept these system settings.

The cloned system will be created in a folder called cloned in the

Multiple Facilities Performing the Same Functionality

Cooperate control files and cloned systems are ideal for multiple similar operations facilities. A company operating up to 999 identical distribution centers can have identical ProRep systems in each location.

Identical systems are created through cloning; a cloned system can then be zipped up using ProRep's built-in zipping system and e-mailed, placed on a disk or network, and unzipped at a remote facility.

Consolidating Information from Diverse Operations

Corporate wide reporting systems can be set up from very diverse operations. The export procedures described in Chapter 15 allow for datafields to be direct to alternate datafields in a remote system. Contact Spalding Software if unsure of the information supplied in Chapter 15.

This Page Intentionally Left Blank

Appendix E: Entering Production Sheets with Elapsed Times

Most ProRep users enter data onto an associate's daily production sheet by entering the clock-in time for the day and then the stop time of each activity. Occasionally, an elapsed time entry is made for breaks, lunch, meetings, and other interrupting events. Alternatively, the total amount of elapsed time for each activity can be entered with out entering any actual clock times.

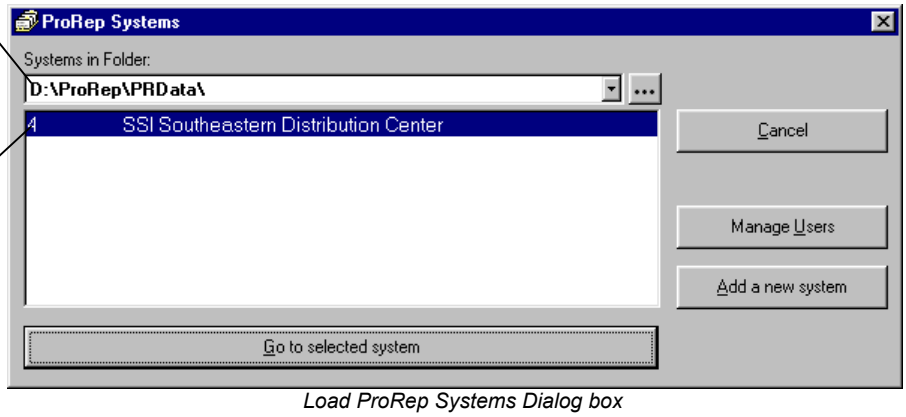
Specifying Elapsed Time Entry

The use of elapsed time entry must be specified in the ProRep system information file. If unsure of the procedures described below please contact Spalding Software.

ProRep's information file is named ddprini.- - 1, the number in the file extension refers to the system number. To determine the system number, look to the left of the system title in the ProRep Systems dialog box.

The information file is in the folder listed here.

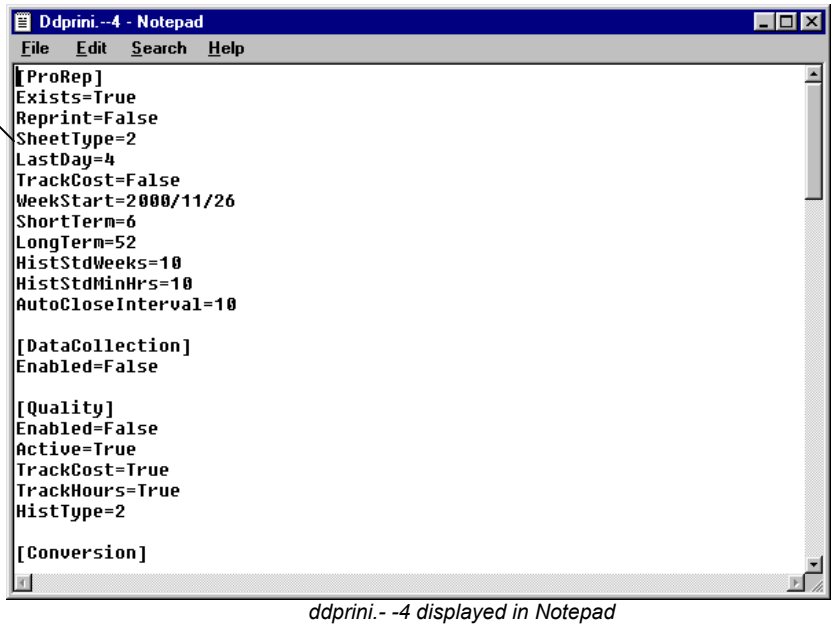
This is the system number. The name of the information file for this system is ddprini.- -4.



Load ProRep Systems Dialog box

To specify elapsed time entry, close ProRep and make sure nobody is in the system. Then open the ddprini file in notepad.

SheetType is initially set to "1" for start and stop time entry. To specify Elapsed Time Entry set SheetType to "2."



ddprini.- -4 displayed in Notepad

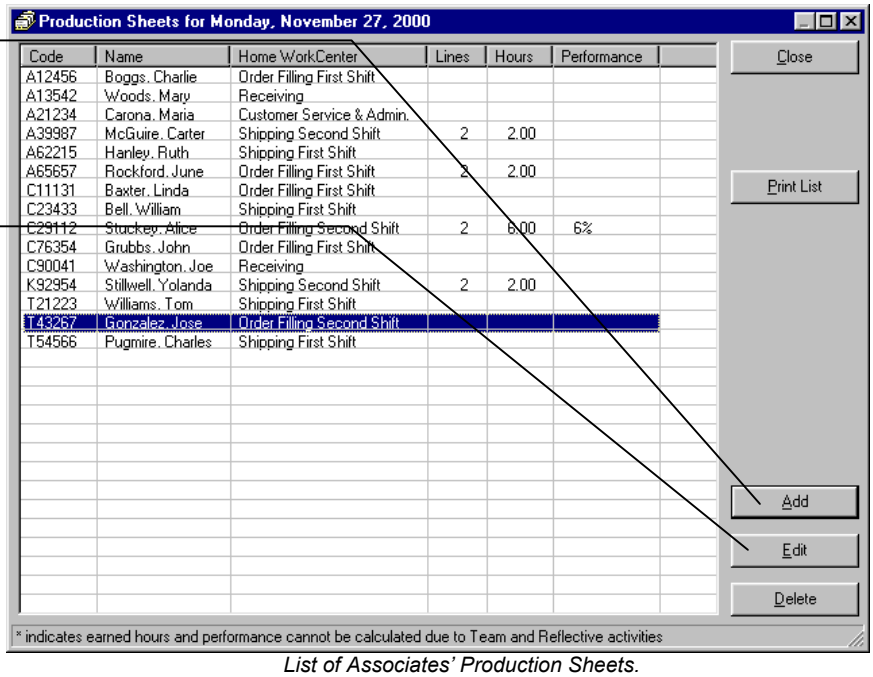
In the [ProRep] sections of the ddprini file, change the SheetType from 1 to 2.

Entering Data Using Elapsed Time Entry

Other than the entry for time, production sheet entry is identical to the instructions in *Chapter 10: Entering Data Directly into ProRep.* This appendix presents only the differences.

To start a new production sheet for an associate, or add additional lines, select Add.

To make changes to an associate's production sheet select Edit.


Production Sheets for Monday, November 27, 2000
Code Name Home WorkCenter Lines Hours Performance
A12456 Boggs, Charlie Order Filling First Shift
A13542 Woods, Mary Receiving
A21234 Carona, Maria Customer Service & Admin.
A39987 McGuire, Carter Shipping Second Shift 2 2.00
A62215 Hanley, Ruth Shipping First Shift
A65657 Rockford, June Order Filling First Shift 2 2.00
C11131 Baxter, Linda Order Filling First Shift
C23433 Bell, William Shipping First Shift
C29112 Stuckey, Alice Order Filling Second Shift 2 6.00 6%
C76354 Grubbs, John Order Filling First Shift
C90041 Washington, Joe Receiving
K92954 Stillwell, Yolanda Shipping Second Shift 2 2.00
T21223 Williams, Tom Shipping First Shift
T43267 Gonzalez, Jose Order Filling Second Shift
T54566 Pugmire, Charles Shipping First Shift
Close
Print List
Add
Edit
Delete
* indicates earned hours and performance cannot be calculated due to Team and Reflective activities

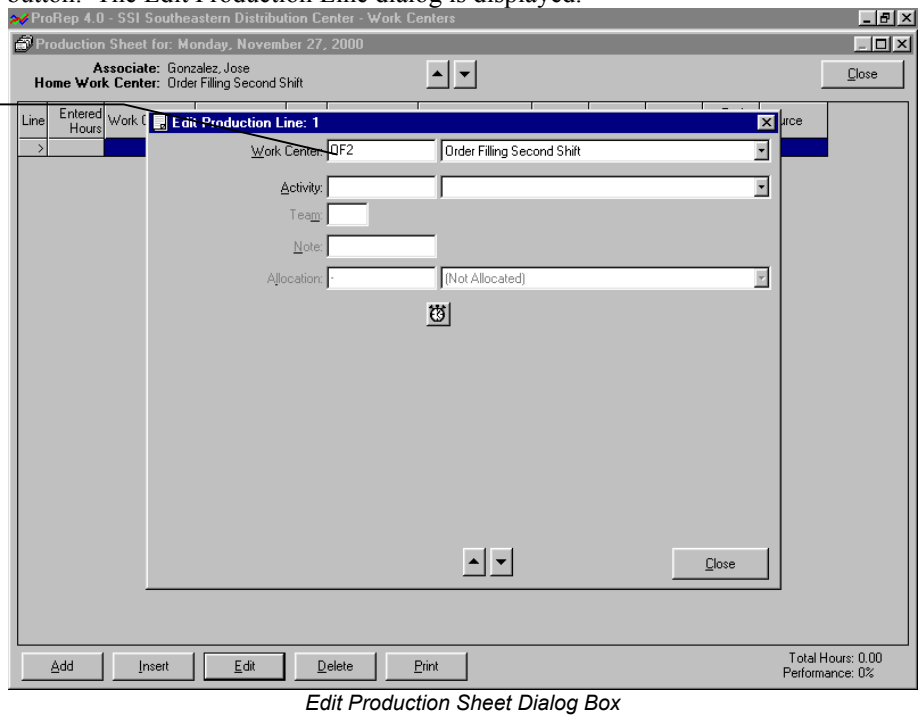
List of Associates' Production Sheets.

Each associate has one production sheet in this file, even if they work in multiple work centers. The associate's production sheet contains a record (or line) for each activity that is performed.

Starting a New Production Sheet for an Associate

To begin entering data for an associate, highlight the associate and click the Add button. The Edit Production Line dialog is displayed.

The associate's work center is pre-filled with either the associate's home work center or the last entered work center.



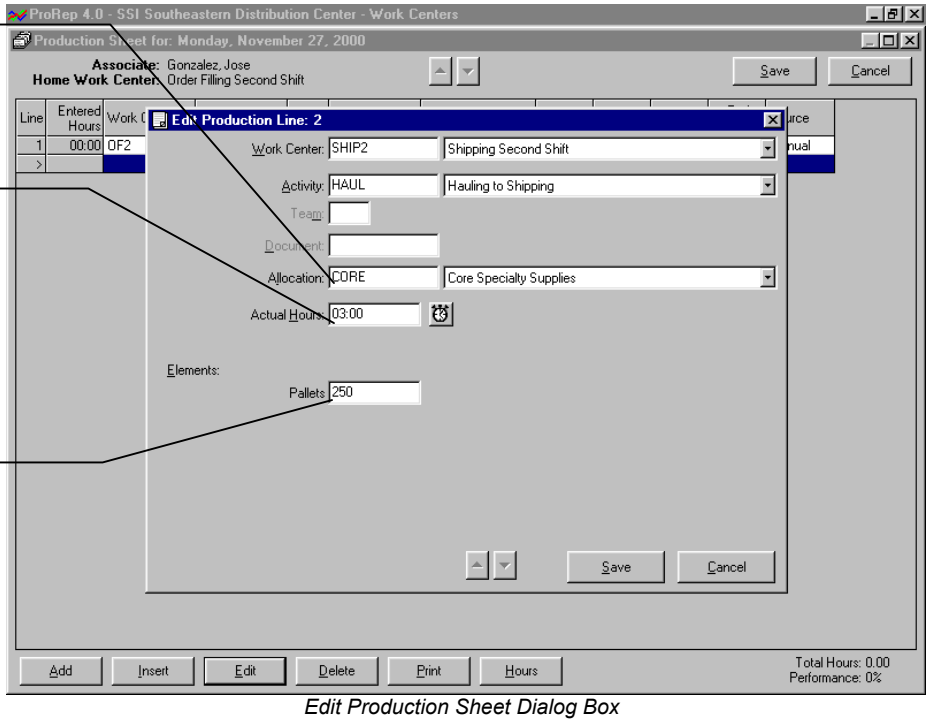
Edit Production Sheet Dialog Box

Each entry in the dialog box is a line on the production sheet. When a line is saved the next line automatically opens.

Some activities must be allocated. This setting is specified when the activity is setup.

Enter the actual number of hours it took to complete the activity. If the activity is set to prorate time, the actual hours prompt is not displayed.

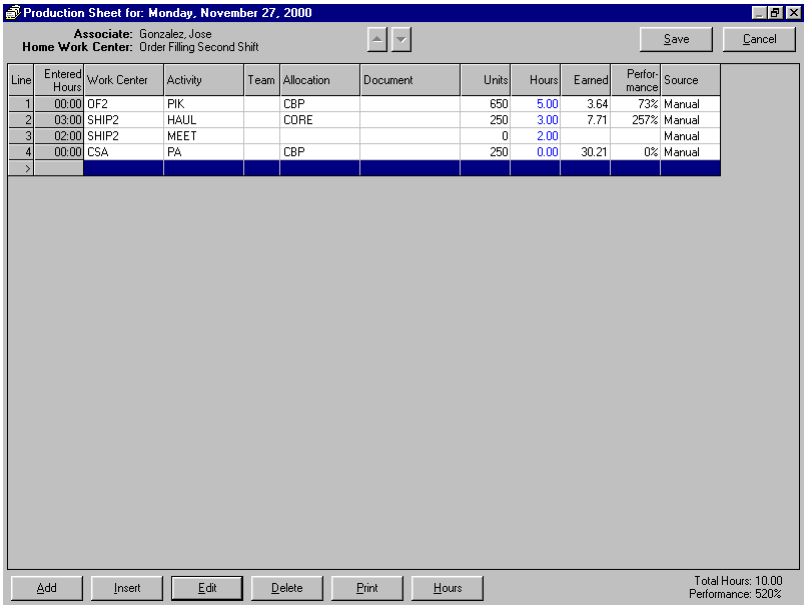
Depending on the activity different elements are listed.



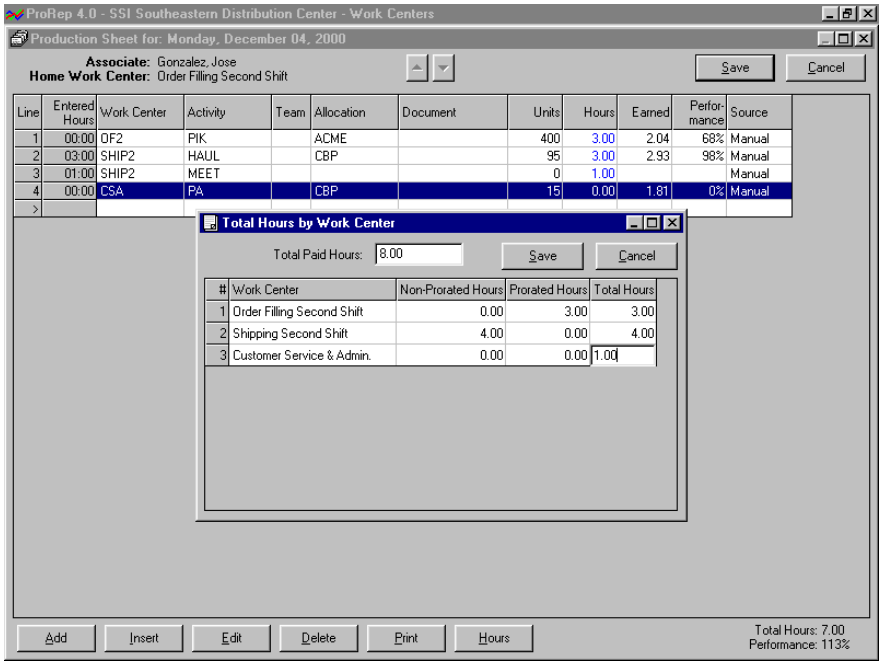
Edit Production Sheet Dialog Box

After each line is entered, click the Save button to automatically open the next line to be entered. After all of the lines have been entered click the Cancel button or <ALT>+C.

All lines on the associate's production sheet are displayed.



Click Save to return to the list of associates. If any activities are set to prorated time, the following will be displayed.


ProRep 4.0 - SSI Southeastern Distribution Center - Work Centers
Production Sheet for: Monday, December 04, 2000
Associate: Gonzalez, Jose
Home Work Center: Order Filling Second Shift
Save
Cancel
Line | Entered Hours | Work Center | Activity | Team | Allocation | Document | Units | Hours | Earned | Performance | Source
1 | 00:00 | OF2 | PIK | | ACME | | 400 | 3.00 | 2.04 | 68% | Manual
2 | 03:00 | SHIP2 | HAUL | | CBP | | 95 | 3.00 | 2.93 | 98% | Manual
3 | 01:00 | SHIP2 | MEET | | | | 0 | 1.00 | | | Manual
4 | 00:00 | CSA | PA | | CBP | | 15 | 0.00 | 1.81 | 0% | Manual
Total Hours by Work Center
Total Paid Hours: 8.00
Save
Cancel
| Work Center | Non-Prorated Hours | Prorated Hours | Total Hours
1 | Order Filling Second Shift | 0.00 | 3.00 | 3.00
2 | Shipping Second Shift | 4.00 | 0.00 | 4.00
3 | Customer Service & Admin. | 0.00 | 0.00 | 1.00
Add
Insert
Edit
Delete
Print
Hours
Total Hours: 7.00
Performance: 113%

Time can only be prorated for measured activities. Unmeasured activities, such as meetings and breaks, can not be prorated. First, the total paid hours are entered. Then the total hours for each work center are entered. The amount of time that is prorated to activities in a work center is calculated as the work center total hours minus (-) the non-prorated hours.

Total hours are entered differently than all other times in ProRep. When entering a prorated amount of time use decimal time, for example 2 hours and 30 minutes should be entered as 2.5 hours.

Total hours are entered differently than all other times in ProRep. When entering a prorated amount of time use decimal time, for example 2 hours and 30 minutes should be entered as 2.5 hours.

This Page Intentionally Left Blank

Appendix F: Command Line Processing in ProRep

The following chapter is an overview of how to run ProRep functions automatically from a command line or a script.

Several of ProRep's functions can be launched using a command line switch. When these functions are launched in this manner, the default printer is used, and no prompts are displayed.

ProRep sets the DOS Error Code when it is launched with a command line process..It will return an Error Code of 0 if successful. Any other value indicates an error. See the Extended Return Codes for more information when using the command line options with the External Data Interface Module.

Command Line Syntax

Th syntax for the command line is the program to run followed by the system number, the system path, and the functions that is to be performed:

*[drive:path\]*ProRep32.exe *system_number [data_folder] [/function]*

The *drive:path* is where ProRep is installed. If the program is launched from that folder, you do not need to include this on the command line. However, it is good practice to include it.

The *system_number* is required if any *function* is included on the command line. The system number refers to the last character of the file extensions. It is also the number that is shown to the left of the system title on the ProRep System dialog box when ProRep is launched without a function switch. It is also displayed by selecting Help > Folders from the menus

The *data_folder* is required if the system is not in the default folder for ProRep.

function is a process to be executed. It is preceded by the / character. Only one *function* may be included on the command line. If no *function* is specified, then the full ProRep interface will be displayed.

Command Line Date Parameters:

Some *functions* require dates. You can specify a date in a dashed format (09-25-2008). Do not use slashes (/). Or you can use the following placeholders for the dates:

-1 = yesterday

-2 = two days ago

+0 or -0 = today

+1 = tomorrow

-# or +# any number of days before or after today

Today is the computer's current date when the command line or *function* within a script is run.

Command Line Functions:

APPLYTA *date*

Applies the Time and Attendance data into a day's Production Sheet File.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

When Uploading Transactions and Applying Time & Attendance from a command line, ProRep prints the Upload Log Reports to a Command Line Log file in PDF format instead of printing to the user's default printer. The Upload Log Reports are appended to the Command Line Log file if it already exists. A separate Command Line Log file is created for each day.

To view the Command Line Log File, click the day on the ProRep calendar and select Data > External Production Data > View Command Line Log.

There are extended Error Codes returned by ProRep to the calling program or batch file. See the section *Extended Return Codes* below for more information

Also, the error messages that would normally be displayed on the screen can be redirected to a log file. See the section *Error Logs and Notifications* below for more information

BACKUPTABLES *[filename]*

Backs-up the system's Tables. The tables are the settings that control how the system is setup, and the DataDiaries.

If the *filename* is not supplied the system will prompt for one. If supplied, the *filename* needs to be fully qualified. An extension of .zip will be added if no extension is provided.

BACKUPFULL *[filename]*

Backs-up all the data files for the system. This includes the Tables and all the Production sheet files, as well as the user-defined reports.

If the *filename* is not supplied the system will prompt for one. If supplied, the *filename* needs to be fully qualified. An extension of .zip will be added if no extension is provided.

CONVERTDAY *date*

Converts transactions into a day's Production Sheet File.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

EXPORTDAY *date dxtype filename [blankdocs non-paid elements descriptions]]*

Exports the data from the day's production sheet file into spreadsheet and database formats.

The *dxtype* is one of the DataExport types in the table below.

The *filename* should be fully qualified, including an extension.

Set *blankdocs* to 1 to include lines that do not have a document. The default setting of 0 will only output lines that do have a document number.

Set *non-paid* to 1 to include lines such as Clock-in, Lunch. If 0, then those lines will not be exported.

Set *elements* to 1 to output the element names and the quantities for each element. If 0, then no element info will be exported.

Set descriptions to 1 to output the Associate Name, Work Center Description, Activity Description, and Allocation Description along with the codes that are always exported.

EXPORTDDDATA *datadiar date numdays filename [dxtype]*

Exports the data from the DataDiaries into spreadsheet and database formats.

The *datadiar* is either W for WorkCenter DataDiary, A for Associate DataDiary, or L for Allocation DataDiary

The *date* is either the begin date or end date to be exported.

The *numdays* is the number of days to export. If a positive number the date will be treated as a start date. If the *numdays* is a negative number then the date will be treated as an end date

The *filename* should be fully qualified, including an extension.

The *dxtype* is one of the DataExport types in the table below. If *dxtype* is not provided. The *filename*'s extension will indicate which format to use.

EXPORTODE *datadiar date numdays filename*

Exports the data from the DataDiaries to ODE file.

The *datadiar* is is W for WorkCenter DataDiary, A for Associate DataDiary, and L for Allocation DataDiary

The *date* is either the begin date or end date to be exported.

The *numdays* is the number of days to export. If a positive number the date will be treated as a start date. If the *numdays* is a negative number then the date will be treated as an end date

The *filename* should be fully qualified, including an extension.

The *dxtype* is one of the DataExport types in the table below. If *dxtype* is not provided, the *filename*'s extension will indicate which format to use.

EXPORTTABLES *dxtype folder*

Exports the data in the tables into spreadsheets and databases.

The *dxtype* is one of the DataExport types in the table below.

The *folder* must exist.

IMPORTASSOC *filename*

Imports data into the Associate Table.

The *filename* needs to be fully qualified. The file must use the format specified for the import.

This is the same as pressing the Import button on the Maintain Associates Table screen.

The filename needs to be fully qualified. The file must be CSV and formatted correctly. You can determine the format by Exporting tables as CSV and then examining the file.

IMPORTDAY *date filename*

Imports data into the Production Sheet file from files that are in the ProRep Production Sheet Import Format.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

The *filename* must be fully qualified.

IMPORTLOOKUP *filename*

Imports data into the Lookup File

The *filename* needs to be fully qualified. The file must use the format specified for the Lookup File.

IMPORTODE *datadiar odenum*

Imports the data from using a ODE Layout into a DataDiary.

The *datadiar* is is W for WorkCenter DataDiary, A for Associate DataDiary, and L for Allocation DataDiary

The *odenum* is either the number of an ODE Layout or the word "ALL". If a number the layout will be used to import data from the ODE files in that layout into the DataDiary. If "ALL", then all ODE Layouts will be imported.

KIOSK *date*

Opens ProRep in Individual Entry Kiosk mode. After it prompts for a User ID and Password, the Kiosk screen will be displayed for the *date* provided. When, a user closes down the Kiosk screen, ProRep will close and exit.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

KIOSKGROUP *date*

Opens ProRep in Group Entry Kiosk mode. After it prompts for a User ID and Password, the Kiosk screen will be displayed for the *date* provided. When, a user closes down the Kiosk screen, ProRep will close and exit.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

KIOSKSELF *date*

Opens ProRep in Self-Transaction Entry mode. After it prompts for a User ID and Password, the Kiosk screen will be displayed for the *date* provided. When, a user closes down the entry screen, ProRep will close and exit.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

PRINTDAY *date*

Prints the Daily Production Reports using the current settings that were last used on the Print Dialog.

SCRIPT *[filename]*

Runs a list of commands contained in a file

If *filename* is not present it is assumed to be PROREP.SCR in the data_folder. If the *filename* is present, the file must either be in the data_folder or the *filename* must be fully qualified.

The file contains other command line options, without the leading / character.

Example script file contents to upload and apply Time and Attendance for yesterday

```
APPLYTA -1
```

```
UPLOADDAY -1
```

UNCONVERTDAY *date*

Un-converts transactions out of a day's Production Sheet File.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

UPLOADDAY *date*

Uploads the WMS and other production data into a day's Transaction file.

The *date* must be in the currently active weeks. The day's files will be created, if they don't already exist.

When Uploading Transactions and Applying Time & Attendance from a command line, ProRep prints the Upload Log Reports to a Command Line Log file in PDF format instead of printing to the user's default printer. The Upload Log Reports are appended to the Command Line Log file if it already exists. A separate Command Line Log file is created for each day.

To view the Command Line Log File, click the day on the ProRep calendar and select Data > External Production Data > View Command Line Log.

There are extended Error Codes returned by ProRep to the calling program or batch file. See the section *Extended Return Codes* below for more information

Also, the error messages that would normally be displayed on the screen can be redirected to a log file. See the section *Error Logs and Notifications* below for more information

Command line examples:

```
T:\programs\ProRep32.exe 1 S:\shared\Prdata /IMPORTLOOKUP C:\LOOKUP.DAT
\\us-server\ProRep\ProRep32.exe 2 \\us-server\ProRep\PRData /UPLOADDAY +0
C:\ProRep\ProRep32.exe 1 /EXPORTODE A +0 -7 V:\Export.ODE
```

DataExport Translation Types for Exporting

Spreadsheets:

Lotus 1-2-3 1A	WKS
Lotus 1-2-3 2.0	WK1
Lotus 1-2-3 3.0	WK3
Lotus 1-2-3 4.0	WK4
Microsoft Excel 2.1	XLS
Microsoft Excel 3.0	XLS3
Microsoft Excel 4.0	XLS4
Microsoft Excel 5.0/7.0	XLS5
Microsoft Excel 97/2000/XP	XLS8
Quattro	WKQ
Quattro Pro	WQ1

Quattro Pro 5.0 for Windows	WB1
Symphony 1.0	WRK
Symphony 1.1	WR1

Databases:

Clarion	DAT
dBase II	DBF2
dBase III	DBF3
dBase IV	DBF4
Microsoft Access 1.1	MDB1
Microsoft Access 2.0 / 2.5	MDB2
Microsoft Access 3.0	MDB3
Microsoft Access 4.0/2000	MDB4

Formatted Text:

Columnwise DIF	DIF
Comma Separated Variable	CSV
HTML Table	HTM
Microsoft CSV	CSVM
Named Values	NVL
Standard Data Format	SDF
Sylk	SLK
Tab Separated Variable	TSV
User-Defined Delimited	UDD
XML 1.0	XML

Text Formats:

Ascii	ASC
Fixed length file	FXD
Mailing Label	LBL
Print image	PRN

Word Processing:

Microsoft Word	DOC
WordPerfect 5.0	W50
WordPerfect 5.1	W51
Word processing text	TXT

Extended Return Codes

When Uploading Transactions (/UPLOADDAY) or Applying Time & Attendance (/APPLYTA) from a command line a Return Code is returned to the application that ran the command line. If the code returned is a 0 (zero) the command line process executed successfully. If any other code is returned the command line process was either not executed or problems were encountered that need to be resolved. Below are the Return Codes and their definition.

ProRep Command Line Return Codes

Return Code	Definition
0	Command Line process executed without an error.
1	"Cannot open Exception File: " & FileName
2	"Cannot open Keep File: " & FileName
3	"Cannot open Sort File: " & FileName
4	"Cannot open Temporary Transaction File: " & FileName
5	"Cannot open Temporary Transaction File: " & TempTransFile
6	"Cannot open the " & mProdsheet.ObjName
7	"Cannot process Record Type: " & mScanText(CurFLine, 1)
8	"Could not find an Activity Code = 'BREAK'. This is needed for Data Collection and Time and Attendance modules."
9	"Could not find an Activity Code = 'ENDDAY'. This is needed for Data Collection and Time and Attendance modules."
10	"Could not find an Activity Code = 'UNKNOWN'. This is needed for Data Collection and Time and Attendance modules."
11	"Could not find Element Code = '" & mTravelDistElmCode & "'. This is needed for Data Collection and XYZ Calculation modules."
12	"Could not find Element Code = '" & mTravelTimeElmCode & "'. This is needed for Data Collection and XYZ Calculation modules."
13	"Could not open and read all files. Try again later."
14	"Could not pull all Associate records from the Quality Staging file. Check the report for which Associates need to be added."
15	"Error Opening Day File exclusively. It may be in use by another user."
16	"Error opening Scan Text File: " & ScanTextFile
17	"The Date has already been posted."
18	"The Date supplied on the command line: " & PValues(2) & " for " & PValues(1) & " is not active in the system."
19	"The Date supplied on the command line: " & PValues(2) & " for " & PValues(1) & " is not in the active weeks."
20	"The Date supplied on the command line: " & PValues(2) & " for " & PValues(1) & " is not valid."
21	"The Time and Attendance file had 0 punches for this date."
22	"There were " & ExcOut & " exception records written to Exception File: " & ExcFile & vbLf & vbLf & "Check the file for records that were not matched in the upload."
23	"There were errors auditing the day file. Check report for details."

24	"This version cannot read data from a Comm Port"
25	“Cannot find Scan Text File: " & TextFile
26	“Cannot find Time and Attendance Instruction File: " & TextFile
27	“Cannot find Time and Attendance Instruction File: “ & TextFile
28	“Cannot open and lock the " & .ObjName & ". It is being used by another user. Try again later.”
29	“Cannot open and lock the " & .ObjName & ". It is being used by another user. Try again later.”
30	“Could not pull all Associate records from the Staging file. Check the report for which Associates need to be added."
31	“Could not pull all Associate records from the Staging file. Check the report for which Associates need to be added.”
32	“Error Moving Transactions.”
33	“Error Opening Day File exclusively. It may be in use by another user.”
34	“Error Unconverting Transactions.”
35	“Errors were found during the upload process. Please check the Upload Log report for details.”

Error Logs and Notifications

Normally, if an error is encountered when Uploading Transactions or Applying Time & Attendance it is displayed on the screen. If the uploads are being run from a command line, the error messages can be directed to a file. If the file already exists, the error messages are appended to the file.

The following settings in the `DDPRINI.–x` file will cause error messages to be written to the specified file rather than displayed on the screen:

[DataCollection]			
T&AerrorLog	Text	“”	The full filename of a file to be created when Time and Attendance data is applied. If the filename contains ? characters, then a second parameter separated by a comma defines how the ? characters should be replaced. YYMMDD would replace with the Year Month and Day
UploadErrorLog	Text	“”	The full filename of a file to be created when Uploads take place. If the filename contains ? characters, then a second parameter separated by a comma defines how the ? characters should be replaced. YYMMDD would replace with the Year Month and Day

Examples:

```
[DataCollection]
UploadErrorLog=\\Server24 \PROREP\Logs\5047_WM_Error_Logs.txt
T&AErrorLog=\\Server24 \PROREP\Logs\5047_Kronos_Error_Logs.txt

[DataCollection]
UploadErrorLog=\\Server24 \PROREP\Logs\5047_WM_Error_Logs.txt????????,MMDDYYYY
T&AErrorLog=\\Server24 \PROREP\Logs\5047_Kronos_Error_Logs.txt????????,MMDDYYYY
```

If an error is encountered when Uploading Transactions or Applying Time & Attendance from a command line it can also be sent by email to specified email address. The following settings in the `DDPRINI.—x` file will cause error messages to be emailed to the specified address.

[SMTP]			
Server	URL	“”	The SMTP mail server to use to send Error Messages when doing Command Line processes.
Port	Number	21	The SMTP port number
From	Text	“”	The email address for the sender. Must be valid on the SMTP server
To	Text	“”	The email address to send the message to.

This page intentionally left blank

Appendix G: Production and Quality Sheet Import File Formats

This appendix is an overview of how to create a file that can be used to import data into the daily Production and Quality sheet files.

The type of files that can be imported are Comma Separated Values (CSV) with commas between each field. All records must end in both a Carriage Return and a Line Feed character (ASCII 13 &10, CR/LF). Use of quotation marks around text fields is optional. Records can contain additional blank fields (commas) at the end of the record. They will ignored.

Stop Time Production Sheet Files

A production sheet import file can contain data for only one day's production sheet. The file consists of one Header Record and any number of Detail Records. The Header Record specifies the date of the production sheet into which the data is to be imported and the disposition of existing records in the production sheet file. Each Detail Record corresponds to a line or record on an associate's production sheet.

Header Record

Each header record must contain the following fields:

RecType, Month, Day, Year, MergeFlag, ImportType, IDType

RecType is always "PROREP 4"

ImportType is always "START/STOP TIMES"

MergeFlag - A "0" deletes all records in the production sheet file before importing. Either a "1" or a "-1" appends or adds the records in the import file to the production sheet file without deleting any existing records in the production sheet file.

IDType (optional) – if not present or if 0, then the AssociateID in the records is the Associate Code.

If present a 1-5 indicates that the AssociateID in the records is the Badge #.

The Header Record can contain additional blank fields (commas) at the end of the record. They are ignored.

Header Record Examples:

```
PROREP 4,11,30,2007,-1,START/STOP TIMES
"PROREP 4",11,30,2007,1,"START/STOP TIMES"
PROREP 4,11,30,2007,0,START/STOP TIMES,,,,
```

Detail Records

Each record can contain the following fields:

AssociateID, WorkCenter, ActivityCode, TeamNumber, Allocation Code, Document, StopTime , NumberOfElements, ElementCode(1), ElementQty(1), ElementCode(2), Element Qty(2), ….(NumberOfElements)

StopTime is 24 hour format.

If there are no Elements for an activity like Meeting, enter a 0 (zero) for the **NumberOfElements**. In this case, no **ElementCode**, **ElementQty** field pairs need be included in the record. Optionally, the detail records can be padded with blank **ElementCode**, **ElementQty** field pairs for the purpose of making all records have the same number of fields.

If an **ElementCode** is blank and the **ElementQty** is zero (0) or blank, the field pair is skipped. If an **ElementCode** is blank and the **ElementQty** is greater than zero (0), the quantity is applied to the Activity's first element.

To use the Associate's Home Work Center, enter a "*" in the **WorkCenter** field.

To import elapsed times, enter the **StopTime** followed by a minus followed by the Elapsed Minutes into the Stop Time Field (13:30-15).

To import Quantities without a Stop Time or an Elapsed Time, enter "-*" in the **StopTime** field.

Optional fields:

TeamNumber (blank, 0 - 99)

AllocationCode

Document (max of 16 characters, additional characters are ignored)

Detail Record Examples:

```
203855,PTL,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,14:15,0
203855,PTL,MEET,,,,14:15,0,,,,,,,,                                  (Extra commas are OK)
203855,*,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94     (use home Work Center)
203855,PTL,CL,,,,13:45-45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94  (45 elapsed minutes)
203855,PTL,CTL,,,,-*,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94     (units only, no time)
```

Examples of Entire File:

```
"PROREP 4",11,30,2007,-1,"START/STOP TIMES"
203855,PTL,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,14:15,0
```

OR

```
PROREP 4,11,30,2007,-1,START/STOP TIMES,,,,,,,,,
203855,PTL,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,14:15,0,,,,,,,,
```

Elapsed Time Production Sheet Files

A production sheet import file can contain data for only one day's production sheet. The file consists of one Header Record and any number of Detail Records. The Header Record specifies the date of the production sheet into which the data is to be imported and the disposition of existing records in the production sheet file. Each Detail Record corresponds to a line or record on an associate's production sheet.

Header Record

Each header record must contain the following fields:

RecType, Month, Day, Year, MergeFlag, ImportType, IDType

RecType is always "PROREP 4"

ImportType is always "ELAPSED TIMES"

MergeFlag - A "0" deletes all records in the production sheet file before importing. A "-1" imports without deleting any existing records.

IDType (optional) – if not present or if 0, then the AssociateID in the records is the Associate Code.

If present a 1-5 indicates that the AssociateID in the records is the Badge #.

The Header Record can contain additional blank fields (commas) at the end of the record. They are ignored.

Examples:

```
PROREP 4,11,30,2007,1,ELAPSED TIMES
                      or
"PROREP 4",11,30,2007,0,"ELAPSED TIMES"
                      or
PROREP 4,11,30,2007,1,ELAPSED TIMES,1,,,,,,,,
```

Detail Records

Each record can contain the following fields:

AssociateID, WorkCenterCode, ActivityCode, TeamNumber, AllocationCode, Document, ElapsedHours, ProrationOverride, NumberOfElements, ElementCode(1), ElementQty(1), ElementCode(2), ElementQty(2), ….(NumberOfElements)

ProrationOverride is usually always a "0" (zero) or blank. This indicates that the Prorate Hours setting in the Activity table controls if the actual hours are prorated based on earned hours. If this field is set to "-1" in any record for an associate, the activity table setting is ignored and no proration will take place.

If there are no Elements for an activity like Meeting, enter a 0 (zero) for the **NumberOfElements**. In this case, no **ElementCod**e, **ElementQty** field pairs need be included in the record. Optionally, the detail records can be padded with blank **ElementCode**, **ElementQty** field pairs for the purpose of making all records have the same number of fields.

If an **ElementCode** is blank and the **ElementQty** is zero (0) or blank, the field pair is skipped. If an **ElementCode** is blank and the **ElementQty** is greater than zero (0), the quantity is applied to the Activity's first element.

To use the Associate's Home Work Center, enter a "*" in the Work Center field.

ElapsedHours can be decimal hours (8.5), or hours and minutes (8:30).

Detail Records can contain Quantity (unit) data with **ElapsedHours** of zero (0) or blank. Likewise, Detail Records can contain Hours with a Quantity of zero (0) or blank. This is useful when only unit data is imported from one system and only hours are imported from a time & attendance system.

Optional fields that can be left blank:

TeamNumber (blank, 0 - 99)

AllocationCode

Document (max of 16 characters, additional characters are ignored)

Example Detail Records:

```
203855,PTL,CL,,,,6.75,0,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,.50,0,0
203855,PTL,MEET,,,,.50,0,0,,,,,,,,
203855,PTL,MEET,,,,.50,0,4,,,,,,,,
```

Examples of File (including Header):

```
PROREP 4,11,30,2007,1,ELAPSED TIMES
203855,PTL,CL,,,,6.75,0,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
```

```
203855,PTL,MEET,,,,.50,0,0

            OR

PROREP 4,11,30,2007,1,ELAPSED TIMES,,,,,,,,,,
203855,PTL,CL,,,,6.75,0,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,.50,0,0,,,,,,,,

            OR

PROREP 4,11,30,2007,1,ELAPSED TIMES,,,,,,,,,,
203855,PTL,CL,,,,6.75,0,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,.50,0,4,,,,,,,,
```

Quality Sheet Files

A quality sheet import file can contain data for only one day's quality sheet. The file consists of one Header Record and any number of Detail Records. The Header Record specifies the date of the quality sheet into which the data is to be imported and the disposition of existing records in the quality sheet file. Each Detail Record corresponds to a line or record on an associate's quality sheet.

Header Record

Each header record must contain the following fields:

RecType, Month, Day, Year, MergeFlag, ImportType

RecType is always "PROREP 4"

ImportType is always "QUALITY"

MergeFlag - A "0" deletes all records in the quality sheet file before importing. Either a "1" or a "-1" appends or adds the records in the import file to the quality sheet file without deleting any existing records in the quality sheet file.

The Header Record can contain additional blank fields (commas) at the end of the record. They are ignored.

Header Record Examples:

```
PROREP 4,7,23,2007,-1,QUALITY
"PROREP 4",07,23,2007,1,"QUALITY"
PROREP 4,7,23,2007,0,QUALITY,,,,,,,,,,,
```

Detail Records

AuditorID, AssociateID, WorkCenter, TypeofWorkCode, AllocationCode, Document, ErrorType, AuditedUnits, FailedUnits, NumberOfMistakes,

MistakeCode(1), MistakeQty(1), MistakeCode(2), Mistake Qty(2), …., Mistake Qty (NumberOfMistakes)

ErrorType is either 1 (Audit), 2 (Check) or 3 (Catch)

The detail records can be padded with blank MistakeCode, MistakeQty field pairs for the purpose of making all records have the same number of fields.

If a **MistakeCode** is blank and the **MistakeQty** is zero (0) or blank, the field pair is skipped. If an **MistakeCode** is blank and the **MistakeQty** is greater than zero (0), the quantity is applied to the Activity's first Mistake.

To use the Auditor's Home Work Center, enter a "*" in the **WorkCenter** field.

Optional fields:

AllocationCode

Document (max of 16 characters, additional characters are ignored)

Detail Record Examples:

```
203855,PTL,CL,,,,13:45,1,100,1,2,UNDER,1,OVER,1
203855,PTL,MEET,,,,14:15,0,,,,,,,,                                    (Extra commas are OK)
203855,*,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94       (use home Work Center)
203855,PTL,CL,,,,13:45-45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94  (45 elapsed minutes)
203855,PTL,CTL,,,,-*,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94       (units only, no time)
```

Examples of Entire File:

```
"PROREP 4",11,31,2005,-1,"QUALITY"
203855,PTL,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,14:15,0
```

OR

```
PROREP 4,11,31,2005,-1,QUALITY,,,,,,
203855,PTL,CL,,,,13:45,4,SLOTS,85,PIECES,103,CARTONS,28,REACHES,94
203855,PTL,MEET,,,,14:15,0,,,,,,,,
```

Index

A

Account Comparison Report, 181, 182
  Layout, 181
Acquiring Production Data from Other Computer Systems, 109, 130, 139
Activities, 30, 89
Activity
  Adding or Editing an Activity, 91
  Entering the Activity's Description, 92
  Specifying that the Activity has a Team Standard, 96
  Specifying that the Activity has an Individual Standard, 96
  Specifying that the Activity has No Standard, 96
  Specifying the Activity's Identification Code, 92
  Specifying the Activity's Type of Work, 93
  Tracking the Number of Times an Activity is Performed, 102
activity detail report, 189, 190, 192, 195, 196, 197
Activity Detail Report, 181, 189, 190
  Columns, 190
  Lines, 190
Activity Detail Reports
  Layouts, 189
Adding
  New System, 39
  Account Comparison Report, 181
  Activity, 91
  Adding or Deleting Associates from a Group, 67
  Allocation, 61
  Allocation to an Activity, 103
  Allocations from a Group, 70
  Associate Group, 66
  Datafield, 71
  Element, 83
  Element to an Activity, 101
  Lines on a report, 195
  New Report, 191
  or Deleting Work Centers from a Group, 65
  Report Column, 193
  Type of Work, 86
  Work Center Group, 63
Adding or Editing a Graph, 207
Adding or Editing a Work Center, 49
Adding or Editing Associates, 53
Allocating Space for More Datafields, 73, 90
Allocation
  Adding or Editing an Allocation, 61
  Deleting an Allocation, 62
  Specifying an Allocation's Description, 62
  Specifying an Allocation's Identification Code, 62
Allocation Account Groups, 33, 68
  How Allocation Group Totals are Calculated, 68
Allocations, 29, 60
Allowing Units from the Lookup File to be Changed, 102
Approving Daily Files for Posting, 113
Assigning a PC to an Associate, 134
Associate Account Groups, 33, 65
  Adding or Deleting Associates from a Group, 67
  Adding or Editing an Associate Group, 66
  Deleting an Associate Group, 68
  How Associate Group Totals are Calculated, 66
Associate Analysis, 160
Associate Cost Analysis, 161
Associate Performance Analysis, 160
Associates, 29, 53
Associates Entering Their Own Data, 129
Associates Sharing a PC, 134
Automatically Prorating Measured Hours to an Activity, 99

B

Backing Up ProRep, 120
Building Column Headings, 185

C

Calculating Performance for a Support Activity, 98, 235

Centering a Column Heading Across Multiple Columns, 186
Changing a Column Heading's Font, Size, or Color, 186
Changing the Logo, 6
Changing the Scale, 203
Charts and Graphs, 199
Clocking Out at the End of the Day, 133
Closing Real-Time Self-Entry, 134
Command Line Processing, 269
Common Formulas, 175
Complex Formulas, 177
Copying Charts into Other Applications, 216
Corporate Wide Information, 25
Correcting Posted Data, 117
  Once data has been posted it should NEVER have to be changed., 117
Creating a New ProRep System, 39
Creating Daily Files, 107
Customizing ProRep to Your Needs, 45

D

Daily Files
  Approving Daily Files for Posting, 113
  Correcting the Daily Files' Date, 108
  Creating Daily Files, 107
  Deleting Daily Files Without Posting, 108
  Posting, 114
  Understanding the Active Week Concept, 107
Daily Procedures, 107
Daily Reports, 13, 14, 27–28, 27–28, 109, 111, 113, 117, 157, 159
  Printing, 109
DataDiary, 145
Datafield, 34, 71–75, 84, 101, 106, 175, 196, 211, 233
Datafields, 34, 70
  Deleting, 74
Deleting a Work Center, 52
Deleting a Work Center Group, 65
Deleting an Activity, 106
Deleting an Allocation from an Activity, 104
Deleting an Allocation Group, 70
Deleting an Associate, 58
Deleting an Element from an Activity, 101
Detailed Production Sheet Report, 13, 157
Displaying, 72, 88, 100, 102, 104, 134
Displaying the Activity's Datafields, 104
Displaying the Settings for all of the Elements, 102
Displaying the Time It Should Take to Complete an Activity, 134
Distributing Hours and Units to an Allocation Account, 95
Distributing Reports, 172
Document from a File, 93
document numbers, 139
Document Numbers, 93
Drawing Symbols at Each Point That is Plotted, 205

E

Editing
  Existing Account Comparison Report, 183
Editing an Existing Report, 183, 193
Element
  Adding or Editing an Element, 83
  Deleting an Element, 84
  Displaying the Settings for all of the Elements, 102
  Selecting the Element Used for the Historical Standard, 102
Elements, 28, 31, 45, 49, 83–84, 83, 94, 96, 100–103, 111, 250
End of Week Processing, 100, 119
Entering
  Associate's Date of Hire, 55
  Associate's Pay Rate, 56
  Associate's Social Security Number, 56
Entering a Break and Other Activities Occurring in the Middle of a Job, 128
Entering and Modifying Data in the DataDiaries, 146
Entering Break, Lunch and Other Interrupting Events, 132
Entering Data Into Production Sheets, 108
Entering Data into Quality Sheets, 109
Entering Document Numbers, 93
Entering Multiple Documents for the Same Period of Time, 93
Entering Production Data Directly into ProRep, 125
Entering the Associate's Name, 55
Entering the Work Center's Description, 50
Exporting, 219
  Data From a ProRep System, 219
Exporting Data to Non-ProRep Systems, 150
Exporting Report Data, 172
Expressions, 49, 175, 177, 178–79, 178, 187, 195, 209, 214

F

Fiscal Calendar, 39, 43–44, 43–44, 49, 76, 79–81
Fiscal Calendar Structure, 76, 79–82, 79
Formatting Numbers in a Column, 185
Formulas, 49, 175–79, 175, 177, 187, 190, 192, 195, 203, 208–9, 214
  Common Formulas, 175
  Complex Formulas, 177

G

Getting Data Into Production Sheets, 125
Getting Units for a Document from a File, 93

Getting Units from Another Computer System While Entering Production Data, 139
Graphs
Adding or Editing a Graph, 207
Changing the Scale, 203
Copying Charts into Other Applications, 216
Drawing Symbols at Each Point That is Plotted, 205
Handling Points that Have a Value of Zero, 205
Modifying and Creating Line Graphs, 206
Plotting a Line's Average Value, 204
Plotting Arbitrary Horizontal Lines, 204
Plotting by Day, Week or Month, 203
Plotting Lines as a Percent Variance from Average, 205
Plotting Only Within a Specific Range of Dates, 206
Printing a Logo on a Graph, 205
Printing the Graph, 206
Selecting the Accounts or Groups to Plot, 203
Selecting the Data to be Plotted, 208
Selecting the Time Period When Plotting by Day, 203
Selecting the Variables to Plot, 203
Selecting the Years to Plot, 203
Setting the Scale's Starting Point, 203
Specifying the Graph's Default View, 209
Using the Same Scale for Daily, Weekly and Monthly Plotting, 204
Viewing and Printing, 199

H

Handling Points that Have a Value of Zero, 205
Historical Standard, 102
Hours Audit Report, 113, 158
How Allocation Group Totals are Calculated, 68
How Associate Group Totals are Calculated, 66
How Performance and Productivity are Measured, 34
How Work Center Group Totals are Calculated, 63

I

Importing, 220
Data from another ProRep System, 220
ODE File, 222
Importing Data from a Production Sheet Import File, 142
Importing Data from a Time and Attendance System, 139
Importing Data from Non-ProRep Systems, 148
Importing Data into the Document Lookup File, 140
Incentive based on the Associate's Past Performance, 98, 235
Including a Percent Increase/Decrease in a Column, 185
Including a Variable in a Total or Subtotal Line, 196
Including Last Year's Data in a Column, 185
Including the Activity's Units in Allocation Totals, 100
Installation, 1
Installing, 1, 2, 3
Software from the Network Drive to a Workstation, 2, 3
Software to a Network Drive, 1

K

Key Entry into Production Sheets, 125

L

Layout of the Lookup Import File, 141
Learning ProRep, 10
ProRep Manual, 10
ProRep Tutorial, 10
License Key, 1, 225
Line Description, 196
Lookup Import File, 139
Lunch, 89, 109, 129, 132–33, 132, 133

M

Making an Associate Ineligible for Incentive Pay, 57, 234
Manually Purging Records from the Lookup File, 141
Measuring Peromance and Productivity, 34
Modifying and Creating Line Graphs, 206
Modifying and Creating Pie Charts, 213
Modifying Previously Entered or Missed Transactions, 134
Multiple Documents for the Same Period of Time, 93
Must Find, 140

N

No Reuse, 140
Not Including the Associate on the Incentive Payroll Report, 57, 234

O

On Screen Self Entry, 93, 129, 134
One-Line Report, 253
One-Line Reports, 166, 188
Other Non-Paid Time, 129
Overview, 9, 27, 253

P

Packing the Lookup File, 141
Paying Incentive based on the Associate's Past Performance, 98, 235
pie chart, 210–12, 213–15
Plotting a Line's Average Value, 204
Plotting Arbitrary Horizontal Lines, 204
Plotting by Day, Week or Month, 203

Plotting Lines as a Percent Variance from Average, 205
Plotting Only Within a Specific Range of Dates, 206
Posting Daily Files, 114
Pre-Defined Associate Graphs, 17
Pre-Defined Associate Reports, 14
Pre-Defined Work Center Charts, 22
Pre-Defined Work Center Reports, 18
Preparations Before Adding a New System, 39
Print Sequences, 190
Printing
  Account Comparison One-Line Reports, 166
  Account Comparison Time Series Reports, 162
  Activity Detail Reports, 168
  Daily Production Reports, 157
  XE "Daily Reports:Printing" Daily Reports, 109
  Detailed Production Sheet Report, 157
  Distributing Reports, 172
  Exporting Report Data, 172
  Hours Audit Report, 158
  Production Summary Report, 158
  Viewing Daily Production Reports, 159
  Viewing Reports, 171
Printing a Logo on a Graph, 205
Printing a Logo on a Report, 188
Printing Daily Reports, 109
Printing Grid Lines on a Report, 188
Printing Notes on a Report, 188
Printing Reports, 157
Printing the Graph, 206
Production and Quality Sheet Import File Formats, 279
Production Sheet Entry, 125
Production Sheets, 108
Production Summary Report, 14, 112, 158
Prorating Measured Hours to an Activity, 99
ProRep Desktop, 9
ProRep Manual, 10
ProRep Tutorial, 10
Purging Deleted Datafields from the DataDiary, 75

Q

Quality Sheets, 109

R

Real-Time Self-Entry, 93, 129, 134
Reindexing the Lookup File, 141
Removing Lunch and Other Non-Paid Time, 129
Report
  Adding lines on a report, 195
  Adding or Editing a Column, 184
  Adding Report Column, 193
  Adjusting the Heading Height, 187
  Adjusting the Width of a Column, 185
  Assigning a Title, 183
  Assigning Datafields to the Variables, 196
  Building Column Headings, 185
  Centering a Column Heading Across Multiple Columns, 186
  Changing a Column Heading's Font, Size, or Color, 186
  Column Total or Average, 181
  Columns, 181
  Creating Separation Between Lines, 196
  Entering Text for a Column Heading, 186
  Formatting Numbers in a Column, 185
  Heading, 181
  Including a Percent Increase/Decrease in a Column, 185
  Including a Variable in a Total or Subtotal Line, 196
  Including Last Year's Data in a Column, 185
  Line Description, 196
  Modifying the First Column, 184
  Options, 184, 187, 188, 196, 197
  Print Sequence, 181
  Printing a Logo on a Report, 188
  Printing Grid Lines on a Report, 188
  Printing Notes on a Report, 188
  Selecting Paper Orientation, 188
  Selecting Paper Size, 188
  Selecting the Accounts and Groups to be Printed, 188
  Selecting the Data to Appear in the Column, 186
  Selecting the Fonts of Numbers in a Column, 185
  Specifying Column Totals or Averages, 185
  Specifying the Type of Line, 196
  Suppressing Printing of Lines Without Data, 189
  variables, 190, 192, 195, 196
report layout file, 181
Report Options, 184, 187, 188, 196
Resources for Learning ProRep, 10
Reusing a Document's Units in the Lookup File, 94
Running ProRep, 6, 130, 172, 216

S

Selecting How Standard Times are Entered and Displayed, 100
Selecting Paper Orientation, 188
Selecting Paper Size, 188
Selecting the Accounts and Groups to be Printed, 188, 196
Selecting the Accounts or Groups to Plot, 203
Selecting the Data to Appear in the Column, 186
Selecting the Data to be Plotted, 208
Selecting the Element Used for the Historical Standard, 102
Selecting the Fonts of Numbers in a Column, 185
Selecting the Time Period When Plotting by Day, 203
Selecting the Variables to Plot, 203
Selecting the Years to Plot, 203

Self-Entry, 93, 129, 134
Serial Number, 1
Setting the Default Folder for Files, 5
Setting the Scale's Starting Point, 203
Setting the Work Center's Normal Work Hours, 51
Setting up Activities, 49, 83, 233
Setting Up Activities, 83
Share Units, 140
Special Activity Codes, 133
Specifying
  that the Activity has a Team Standard, 96
  that the Activity has an Individual Standard, 96
  that the Activity has No Standard, 96
  the Element's Default Standard, 102
  the Elements that are Included in the Activity Totals, 102
  the Order in Which Elements are Listed, 101
  the Standards for an Allocation's Elements, 104
Specifying a 53 week year, 79
Specifying an Allocation's Description, 62
Specifying an Allocation's Identification Code, 62
Specifying an Associate's Home Work Center, 55
Specifying an Associate's Primary Grouping, 55
Specifying an Associate's Shift, 55
Specifying Column Totals or Averages, 185
Specifying that Document Numbers will be Entered, 93
Specifying that the Activity has a Team Standard, 96
Specifying that the Activity has an Individual Standard, 96
Specifying that the Activity has No Standard, 96
Specifying that the Activity's Standard is Historical, 99
Specifying that the Same Standards are used for All Allocations, 99
Specifying the Activity's Identification Code, 92
Specifying the Activity's Type of Work, 93
Specifying the Associate's Identification Code, 54
Specifying the Element's Default Standard, 102
Specifying the Elements that are Included in the Activity Totals, 102
Specifying the First Day of a Fiscal Year, 79
Specifying the Graph's Default View, 209
Specifying the Order in Which Elements are Listed, 101
Specifying the Password for Approving Production Sheets, 51
Specifying the Standards for an Allocation's Elements, 104
Specifying the Work Center's Identification Code, 50
Specifying the Work Center's Shift, 51
Specifying the Work Center's Supervisor, 51
Standard Times are Entered and Displayed, 100
Starting a New Production Sheet for an Associate, 126
Starting Real-Time Self-Entry, 130, 135
Support, 7
Support Activity, 98, 235

T

Tables, 28, 35, 39, 45, 49, 53, 61, 71, 77, 80, 83, 85, 86, 90–91, 120, 250
The ProRep Desktop, 9, 107
Tracking Data Not Associated with an Activity, 146
Tracking the Number of Times an Activity is Performed, 102
Types of Work, 28, 32, 45, 49, 83, 85–86, 86, 89, 228, 241, 244
  Adding or Editing a Type of Work, 86
  Deleting a Type of Work, 89

U

Understanding the Active Week Concept, 107
User-Defined Associate Charts, 18
User-Defined Associate Reports, 16
User-Defined Work Center Charts, 22
User-defined Work Center Reports, 20
Using the Same Scale for Daily, Weekly and Monthly Plotting, 204

V

Variables, 199, 203, 208, 211, 214
Viewing an Associate's Transaction, 134
Viewing and Printing Line Graphs, 199
Viewing and Printing Pie Charts, 209
Viewing Daily Production Reports, 159
Viewing Reports, 157, 171
Viewing the DataDiary, 145

W

warehouse management system, 139
Weekly Procedures, 119
  End of Week Processing, 119
Work Center, 9, 13–14, 13–14, 13–14, 18–19, 18–22, 18–22, 20–22, 22, 27–28, 27–28, 28, 33–34, 33–34, 36, 41, 45, 49–52, 55, 58, 63–65, 63, 70, 89, 90, 96–97, 99, 104, 109, 112, 114, 142, 157–58, 160, 164, 166, 169, 178, 201, 207, 210, 213, 232–33, 235, 257–58
Work Center Account Group
  Adding or Editing a Work Center Group, 63
  How Work Center Group Totals are Calculated, 63
Work Center Account Groups, 28, 33
Work Center DataDiary, 18, 27–28, 27–28, 33, 49, 63, 114
Work Center Information, 18
Work Centers, 14, 20, 22, 23, 28–29, 28–29, 31–33, 33, 39, 45, 49, 53, 63–65, 97, 99, 113, 115, 117, 119, 126, 158, 199, 235–36, 257

Z

Zip, 120